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July 26th, 1906.

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No. 4.

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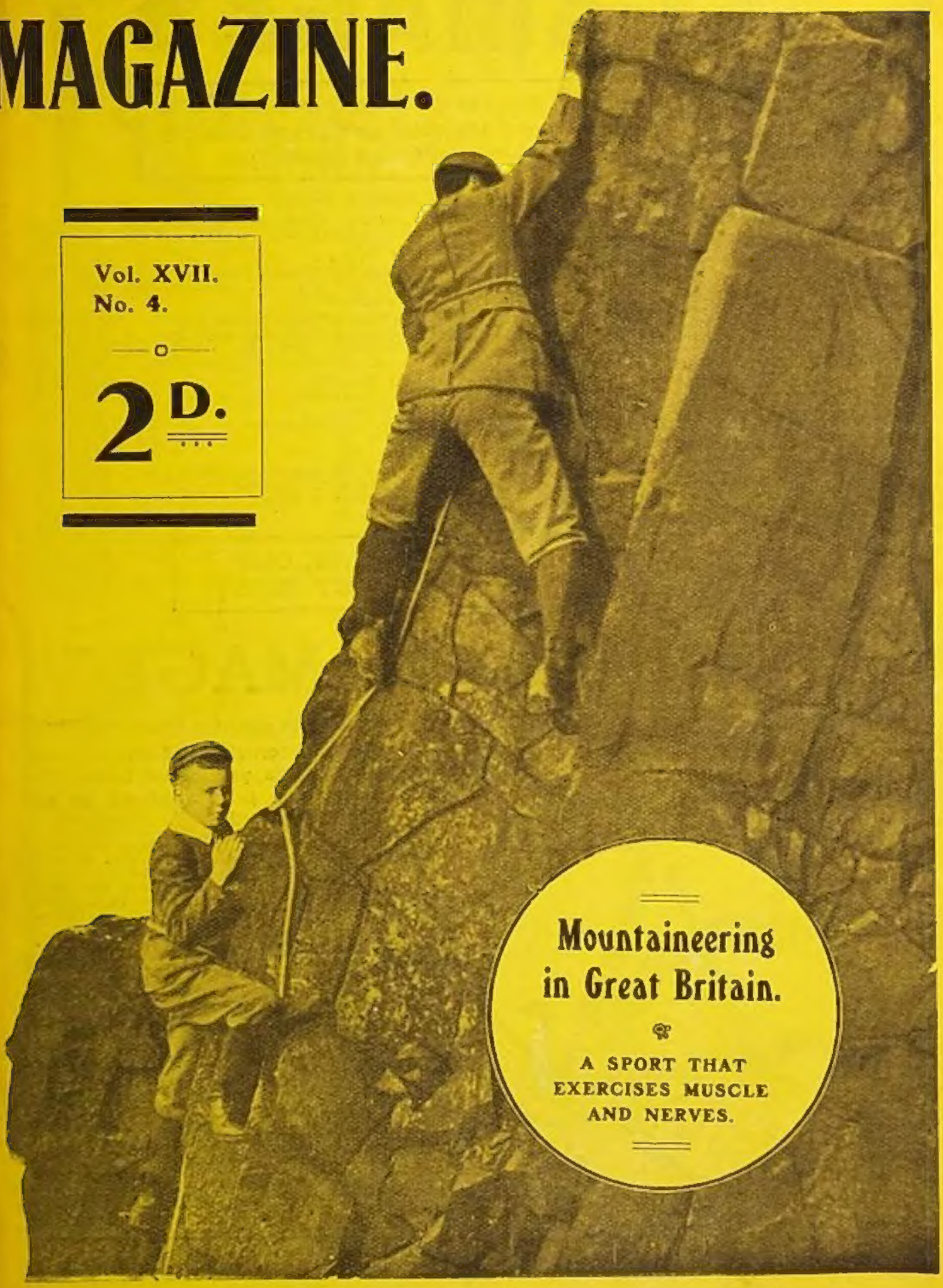

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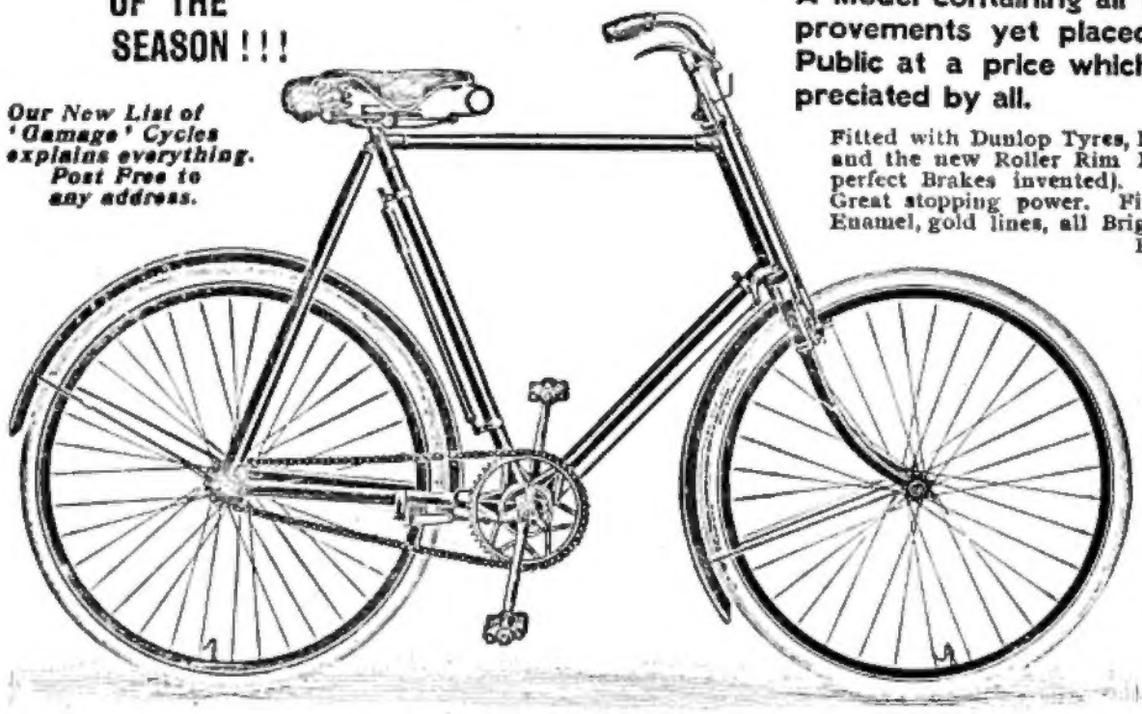

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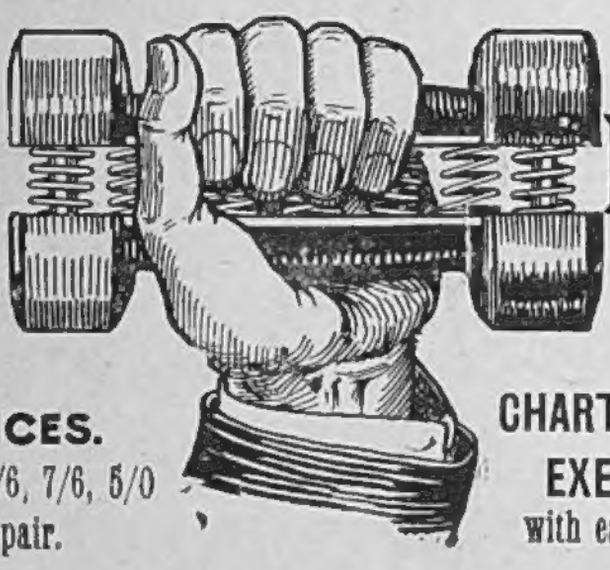

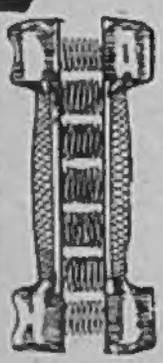

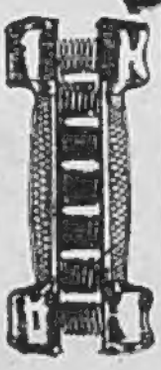

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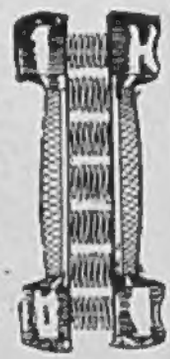

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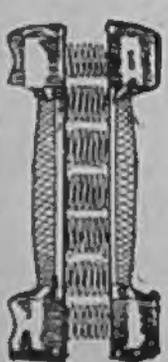

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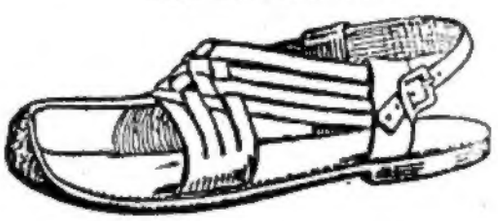

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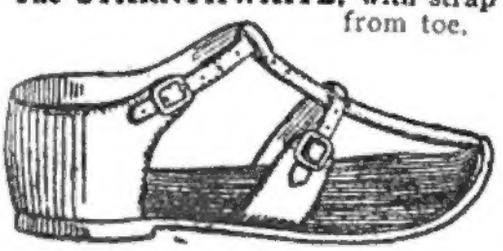

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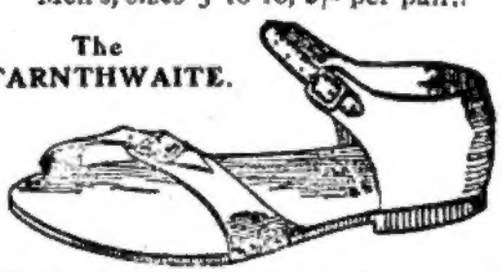

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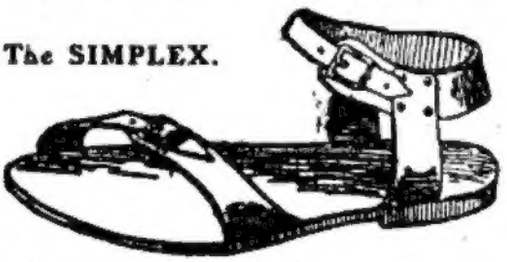

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(Est. 1898). VOL. XVII. No. 4. JULY 26, 1906.

SANDOW'S MAGAZINE

... OF ...

PHYSICAL CULTURE.

Editor: EUGEN SANDOW.
Assistant Editor: FRANK PINK.

MOTTO:—*Mens Sana in Corpore Sano*—A SOUND MIND IN A SOUND BODY.

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NOTES FROM MY NOTE-BOOK.

BY THE EDITOR.

The awful prevalence of the habit of taking poison in the form of drugs is every now and again brought before us by the reports of coroners' inquests on the death of the unfortunate victims of this habit. There is a terrible laxity of the law with regard to the sale of these deadly drugs, and I think it is time that more drastic measures should be formulated to stem this ever-increasing evil. When a person, as recently appeared in the evidence given during a charge of attempted suicide, has not the slightest difficulty in purchasing half an ounce of laudanum at a chemist's shop, the limit of legal tolerance has surely been reached.

o——o

In this nerve-wracking age, the disposition to fly to dangerous sedatives can be understood, for the strenuous life, while innocuous, and even beneficial to the man or woman of sound physique and sturdy constitution, demands a degree of physical efficiency that is the exception rather than the rule. The delicious intoxication of living life to the full is only a pleasure that can be safely indulged in by those whose muscles are tough as steel, whose flesh is firm, whose nerves and lungs are sound, and whose heart beats strongly and steadily. To the strong, the strenuous life is a safety-valve for ebullient energy and overflowing vitality; but to the weak it is a serious wastage of power and vigour that should be carefully husbanded and economised. In the one case, there is a health overplus to be drawn upon without risk to the health-income; in the other, the person is foolishly squandering his health-income.

o——o

There is a terrible warning to young men in these harrowing romances of the coroners' court, which too painfully reveal the ease with which an injurious habit is acquired and the difficulty with which it is broken off. The story of a

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young engineer's conquest by the morphia habit which was told in a London coroner's court the other day is worth all the anti-drug sermons that ever were uttered, and all the anti-drug articles that ever were penned. Let me re-tell it for the benefit of anyone who from any cause whatever has ever felt the temptation to fly to morphia, opium, laudanum, or, indeed, drugs of any kind.

o——o

The victim in this case was John Ernest Doidge, a young electrical engineer, only twenty-seven years of age, and with a distinctly promising career before him. About two years ago, while stationed in China, he began to suffer from pains in the eyes. Someone foolishly advised him to take morphia and cocaine injections for the purpose of alleviating the pain. The habit—as it invariably does—grew stronger and stronger, as also did the strength of the injections, until he daily hypodermically injected as much as twenty-four grains of morphia and twelve of cocaine. At last he had to give up an important position in consequence, and returned to this country about a month ago. He fought wildly but vainly against the overwhelming desire for the deadly drug, and then began as an antidote to inject atrophine and strychnine.

o——o

The inevitable happened. He at last took a dose that even his drug-saturated system could not withstand. He immediately became so violent that his friends could not restrain him, and he had to be removed by the police to an observation ward, where he shortly after died. At the inquest, the medical officer stated that the whole of his arms and other parts of his body were covered with the scars of the injections.

o——o

The slavery of the negro is as nothing in comparison with the slavery of the drug habit. No Legree was ever more brutal to an Uncle Tom than is the tyrant drug habit to its victim. It blurs the mental and moral vision, wrecks the nervous system, atrophies the muscles, and paralyses the volition. With the best of intentions and the utmost of his depleted courage, the victim fights, as this young engineer fought, against the ever-strengthening coils that envelop him, but every atomic cell in his body cries for the dulling, deadening drug, and, weakly resisting, he again and again succumbs, until ultimately, losing heart and hope, he gives up the unequal struggle. The moral is apparent to the wise: Have the courage to be a coward if you are ever tempted to indulge in drugs. Be afraid of them or they will inevitably master you, as they have done thousands of others.

o——o

Milk is the chief source of sustenance for infants and invalids. It is a nice, comforting thing, therefore, to learn from no less an authority than Dr. Beaton, chairman of the Public Health Committee, that two per cent. of the cows in this country suffer from tuberculous udders, and, as a result, that some thirty-two millions of gallons of tuberculous milk are annually consumed by someone or other. Londoners, whose milk has to pass through dozens of hands before it reaches the metropolis, will be glad to learn that the London County Council is seeking Parliamentary powers to enable it to prohibit the supply within the county of milk from any dairy, if the medical officer were of opinion that infectious diseases were caused or likely to be caused by the consumption of such milk.

Eugen Sandow

Don't Coddle.

You never see a happy dyspeptic or a joyful sufferer from gout.

It is the person who feels the thrill of strength and the pleasure of appetite who can enjoy living. When you see an old man with a young face, who walks with a springy step, and radiates cheerfulness, you are pretty sure to find that he is a person who never lets good judgment die from lack of attention and appreciation.

Make yourself a student of your own system, advises *Health*, and try to prevent disease rather than to frighten it away with fierce concoctions after it has a hold on your system. Remember that illnesses thrive on coddling.

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THROWING THE DISCUS.
A Splendid Specimen of the Young Greek Athlete in the Days of Old.

THE MOST INTERESTING OUTDOOR SPORT.

It is Swimming, says Miss Annette Kellermann.

I WILL tell from my experience the easiest methods of learning how to swim, dive and float, the different kinds of strokes, and how to train for racing.

Of all exercises intended to develop the body, to give it suppleness and symmetry, to tone up the whole system, swimming is unequalled.

In addition to its health-giving qualities, swimming is a recreation that offers a pleasure that only its votaries can know and enjoy.

And, above all, no one can tell what day life itself may depend upon our knowing or not knowing how to swim—one's own life or the life of one dear to us.

For all these reasons, it is difficult for me to understand why an art so easily acquired is not possessed by all—women as well as men, girls and boys alike.

Had I my way, I would make it compulsory on every girl and boy who attends school to learn to swim.

Too much cannot be written in favour of swimming as an exercise. What other form of exercise can you describe to me that gives more general beneficial results? Practice in swimming secures a uniform development of the entire body; it brings every muscle into play, and gives strength to heart and lungs.

Even when it is necessary to resort to the tank for our swim, it is an exercise that is unsurpassed in its developing, health-giving results; but, of course, those results are more fully secured by a plunge in the open air, with the sun bath following. No medicine physicians can prescribe equals that in toning up the nerves and invigorating the whole system.

And to learn to swim is so simple!

I have never yet found a girl or boy who could walk who could not learn to swim.

When I have once taught my pupil that she can keep her body afloat in the water I count my work more than half done. After that it is a mere question of practice, of adding step by step to the lesson gained until, almost unconsciously, she has become an expert swimmer and has acquired an art that will give continued pleasure throughout her life.

There are some who learn to swim in deep water, but I advise my readers to begin in water that is not over the learner's shoulders. The most favourable place is still water with a shelving beach, where the learner can walk out until the water is breast high. Then, turning toward the bank or shore, she can, with slight support from a friend's hand, lie prone upon the water and begin the practice of the first stroke.

This first stroke is the breast stroke. The arms are extended in front of the body, with the palms joining. At the word "One," they are spread wide apart, as far as they will go, with the palms turning backward. At the word "Two," hands are brought together again beneath the breast, and at the word "Three," they are again extended in front of the body as they were at first, and the stroke is repeated.

While this movement of the hands and arms is made there is a simultaneous and similar movement of the legs. They are extended together as are the arms in front. At the word "One," they make the same movement as the arms; at the word "Two," they are drawn up, with bending knees, and at the word "Three," they are again extended with a strong backward kick, the feet coming together again as they were before the stroke was begun.

Before entering the water this stroke with arms and legs can be practised on

a piano stool, box or other article that will support the body and leave free play to the limbs.

HOW TO BREATHE WHEN SWIMMING.

And at this point I teach my pupils how to breathe. Now, in swimming, nothing can be of greater importance than correct breathing. Nothing else so clearly marks the difference between the strong, regular swimmer who can keep up stroke after stroke, without tiring, and almost indefinitely, and the feeble swimmer who soon becomes "winded" and whose stroke quickly becomes jerky and feeble, as does the way in which he breathes.

In walking or in other exercise it is customary to breathe through the nose and to exhale through the mouth.

In swimming we do the exact opposite. We should take a quick, deep breath through the mouth and slowly exhale it through the nose. This should be done with each stroke.

The second stroke you should learn after you have mastered the breast stroke and can swim about freely is the underhand side stroke. Usually the swimmer lies on the right side, but either side that comes most natural will be best.

If the swimmer lies on the left side, the right arm is extended forward just under the surface of the water, while the left arm is stretched backward beside the body. The legs are extended backward, with the heel of the right foot against the instep of the left.

The stroke is begun by drawing the right hand backward and downward until the hand is directly below the right side. Simultaneously the left hand is thrust forward beneath the surface of the water until it is in front of the swimmer's face, while the legs are drawn toward the body, but stretched apart, the right knee a little nearer to the surface of the water than is the left.

The double overhand stroke, also called the Trudgeon stroke, after the swimmer who introduced it, is a combination of the side stroke kick with a double overhand stroke, the arms leaving the water alternately, and two strokes being made with them to one leg stroke. The swimmer in using the stroke turns over on the breast as either arm is used and thrusts both arms out of the water alternately instead of only one as in the overhand stroke.

To make a dive the swimmer should stand erect with hands at the side. Bend the knees slightly, draw the arms back and spring forward, the arms now extending in front of the head, palms down, thumbs touching, and keep feet and legs extended straight and close together when entering the water. When the plunge is made turn the hands upward, and the body will at once turn also in the same direction and come to the surface.

Climate and Alcohol.

It is generally believed that the consumption of alcohol, especially in concentrated forms, is greatest in cold climates, and that its effects are there less harmful, owing to more rapid oxidation and the more active life of the natives, while the neglect to reduce the amount of alcohol in warmer regions is considered one of the chief causes of disease among Europeans in the tropics. The researches of Dr. Sikorsky, of Kief, seem to show that this is far from the truth. His country is admirably suited for such an investigation, for over a vast extent of latitude from the White Sea to the Caucasus the Russian peasant has for generations been testing the effects of his favourite solution of alcohol (vodka) with a vigour and persistency worthy of a martyr of science. According to official statistics, the north Russian drinks from 2.46 to 3.07 litres absolute alcohol per annum, while his brother in the south imbibes no less than 3.5 to 4.8 litres. Yet the deaths from alcoholism show a regular increase northward, being 15 to 22 to the million in south, 40 in the centre, and 70 to 110 in north Russia. Moreover, there is a marked increase of such deaths in specially cold years. Dr. Sikorsky concludes that cold greatly increases, even to threefold, the toxicity of alcohol, which, as is well known, so far from increasing bodily temperature, acts as a decided antithermic by paralysing the peripheral vessels and diminishing organic metabolism.

Keeps Boys from the Streets.

"The brigade satisfactorily competes with the temptations of the street," was the Lord Mayor's encouraging statement in presenting the report of the Boys' Brigade to the annual meeting of the London Committee at the Mansion House recently.

There are 146 companies with 7,021 members, and the average attendance at weekly drills is 75 per cent. of this number.

"No other system than the brigade exists for helping working lads to become bright and healthy citizens," was the pronouncement of Field-Marshal Sir George White, and he was supported in this view by Lord Kinnaird, who said that the majority of the 300,000 boys who had passed through the ranks were doing well.

MOUNTAINEERING IN GREAT BRITAIN.

(Concluded from last week.)

The qualities of courage, endurance, patience, unselfishness, we all desire. How are these to be got from mountaineering? The climber is not, or should not be, solitary; he is tied to his friend not only by companionship, but often by a common danger, a common hunger or weariness. He is usually on the same rope as his friend, and a slip of one might be the death of the other. Under trying circumstances, how precious, how sacred this companionship; how it removes meanness, cowardice, and selfishness! Consequently the mountaineering friendships are the closest, the most lasting we can make. A day on the mountains in bad weather will teach you more of your own frailties and those of your friend than a month of holiday-making by the seaside. And then think of the purity of the sport. Amid noble surroundings, with no applause, no betting, no professional element, no onlookers, the band of two or three, a speck on the mountains, fighting the great forces of Nature, and conquering.

EFFECT ON HEALTH AND STRENGTH.

In an article written for this journal, as might be expected, the greatest emphasis must be put on this phase of mountaineering. *Mens sana in corpore sano*—a sound mind in a sound body. It is not, fortunately, a difficult task to prove that besides being a recreator of the higher senses of man, mountaineering is *par excellence* the finest exercise for the muscles, and the grandest health-giver among sports. It is a common experience that arduous though many an expedition may be, and severe the wettings and cold that may await the climber, it is quite the rarest thing for anyone to suffer from cold or rheumatism as a result. Instead, the system seems to get braced up, and the fagged professional man acquires new vigour on the mountains. Let us, then, in conclusion see how it is that British mountaineering can claim and substantiate its claim to be the king of sports.

Many of us are, unfortunately, subject to a sedentary life from day to day. We hurry to business after a hasty breakfast, perchance making use of train or 'bus on the way. Perched on a stool, or in an armchair, the day passes, and again we hurry home, perhaps to snatch some exercise in the form of bowls, cricket, golf or cycling. How many of the muscles of our body have received adequate use? We must not put too much faith in the statement of athletes, but it is said that walking uses about 30 per cent., football 50 per cent., and cricket 60 per cent. of our muscles, and if this be so, how small a proportion must we exercise in our daily life, and even these but for a short time. Now consider the effect of a mountain expedition. As the slope of a hill is ascended, most people get out of breath, and if the exercise is continued the muscles of the front part of the thigh and the calves get more and more tired. According to the condition of the climber, these symptoms may be but of short duration or may persist, eventually giving rise to cramp. What is the explanation of this? In ordinary walking the strain on the legs mainly consists in drawing one leg after the other. In climbing, on the other hand, the leg is bent, and the body must be lifted from step to step. An entirely new set of muscles is called into play. So also in descending, another set must do the work. What happens when muscles work? They contract, and in so doing produce waste products, cinders if you like to call them. If the stoker does not rake the fire, the ashes and cinders soon clog it up. So also if the waste products of the muscles are not removed, the muscles are not only clogged up, but may be even posioned by reabsorption of the waste products. These results give rise to the feeling of tiredness. Fortunately, however, our bodies are wonderfully

well balanced. The heart immediately reacts, pumping the blood more rapidly so as to nourish the labouring muscles; and the blood charged with effete matters, passes away from them to get purified in the liver and the kidneys, and returns, pure again to the heart. At first the circulation is, as it were, in arrears, but eventually an equilibrium is reached, when the well-nourished muscles are equal to the strain put upon them, and liver, kidneys, lungs and heart share in the general increase of strength. When muscles do work, they not only form waste products, but they give off heat, and everyone knows that exercise makes one warm. The feeling of being warm is, however, no true proof that we are really hotter than we were before, and the thermometer indicates but a slight rise of temperature — a degree or so. How, then, is the extra heat disposed of? By the skin. Out of the innumerable pores the sweat issues, and partly by evaporation, and in other ways the body is cooled to its normal limits. Here, again, a healthful condition results, for profuse perspiration frequently results from mountain climbing. But to do work, we require both deeper and more frequent inspirations, and so the tissues of the lungs are renewed and the blood well oxygenated. Experiments show that the higher we ascend, the purer becomes the air and the fewer the microbes. Exercise, then, in the pure air of our mountains, has all the factors which go to secure health —pure air, deep breathing, vigorous stimulation of the muscles, full circulation, and rapid removal of the impurities from the system by the skin, kidneys, and intestines.

GEORGE LURICH,
The Russian Wrestler who defeated Hackenschmidt.

No wonder, then, that the brain shares in the general well-being, and the glorious sights and experiences are drunk in with a relish and exhilaration which come to man but rarely in ordinary life.

Reference has only been made to the muscles of the legs, but those of the back and arms are also brought into play. In rock-climbing especially will be found the fullest exercise of the body, it being estimated that fully 80 per cent. of the muscles are used. Nor is this surprising. In climbing steep rock buttresses or chimneys the hands, the arms, the back are required in pulling, thrusting or twisting the body round awkward corners or up past overhanging rocks, and every fibre, as it were, tingles, not only with the exertion, but with the excitement of the moment. As a result, then, of this vigorous life, nutrition goes on apace, appetite is promoted, and health restored or

increased. It is an interesting fact that many of the most distinguished lady climbers commenced this sport while in feeble health, and testify that each climbing holiday has meant an accession of health, till at last they feel fit for anything.

DANGERS TO HEALTH.

The reader may, however, ask: Are there no drawbacks to this sport? Like every other sport, mountaineering has its dangers—dangers to health, dangers to body; and it only remains to mention these and the safeguards that are necessary to avoid them.

The chief danger is the risk of overdoing it. Men and women advanced to middle life, and who have not kept up the energy of their youth, visit some mountain resort. Infected by the example of others, they attempt some laborious climb. They soon become exhausted, and return home the worse of their effort. The same may happen with younger people. The heart, unaccustomed to the strain, labours hard, and perhaps dilates. If youth is on their side, this passes off, and no permanent result takes place. Sometimes, however, the inelastic arteries and heart become permanently enlarged, and danger ensues. Even, however, with a good heart, one may unduly exhaust one's self by climbing too quickly, or by fits and starts, or by talking continually, breathing persistently by the mouth, and by drinking at every fountain. The use of alcoholic stimulants while climbing can only result in harm. They should be reserved till the return to the hotel. Heavy meat lunches are rarely digested on the mountain, and those who know best confine themselves to jam sandwiches, figs, raisins, chocolate, and the like, at times adding meat, in moderation, and cheese. It is a good plan to drink water freely before and after a climb, so as to dilute the blood and render the flushing of the circulation more easy. Heavy clothing is not desirable. Wearing flannel next the skin, extra wraps should be provided, which are removable as soon as one feels too hot. This is far better than loading one's self up with underflannels, which soon become clogged with perspiration. Indeed, the necessity of proper clothing and equipment very soon forces itself on the climber. But for full information on this point the reader is referred to the volumes on mountaineering in the Badminton and All England series of publications.

DANGERS TO THE BODY.

In Britain accidents are rare. This is not because there is no need for care, but because, as a rule, only those attempt difficult climbing who are well trained and have developed from difficulty to difficulty. The absence of guides assists in this. It is a golden rule among climbers not to climb alone, and the proper use of the rope safeguards against three-quarters of the risks of a difficult climb. To those, therefore, who feel drawn to the sport, the best advice is: Begin gently, and only after experience attempt the difficult. Consider no place too easy for the observance of caution. Do not climb without trusted companions. Observe the strictest rules of climbing, and remember that the best climber is not he who chances most, but the one who chances nothing, who leaves no safeguard unattended to, who remembers that the strength of a chain is the weakest link thereof.

If all these points are remembered, then the lover of Nature may go to the hills certain that his pursuit can only increase his strength and health, and give him a greater reverence for the glorious world in which he lives.

That Unnecessary Knife.

The surgeon's knife is certainly very much in evidence nowadays for appendicitis. Dr. Dieulafoy, of the Hôtel Dieu Hospital, in Paris, has brought a serious indictment against surgeons operating for appendicitis in a large number of cases without being able to diagnose with certainty whether the patients were suffering from that malady or not. He is an eminent authority on appendicitis, upon which he has written an important work. He claims that innumerable operations are performed for non-existent appendicitis, because surgeons cannot, and should not, pronounce on a malady which only physicians can recognise. He cited numerous cases which came under his own notice, in which the patients had been operated upon for appendicitis some weeks previously, and who still felt the same pains in the same region.

ATHLETICS AND HYGIENE.

By Hygiene in the New Album.

THANKS to the fact that the gospel of hygiene is now widely preached in girls' schools, young scholars are brought up under more healthful influences than was the case some years ago, before the modern athletic movement was in progress. Not that athletics must be taken *ad lib.*, without due consideration for temperament and constitution, but, judiciously applied, they are a means of cultivating health, grace, and beauty, and should be regarded as part of the educational curriculum.

ARCHERY AS A HEALTH-GIVER.

In the ordinary way, such simple sports as lawn tennis and archery are highly to be recommended as a means of promoting health and beauty. Archery is especially useful to girls and women who suffer from delicate chests, the drawing of the bowstring being in itself an excellent exercise for expanding the chest and strengthening the muscles thereof, the force required in pulling the string to the correct distance to let the arrow fly, associated as it is with slowness and deliberation, being a very fine form of physical drill for the upper part of the body.

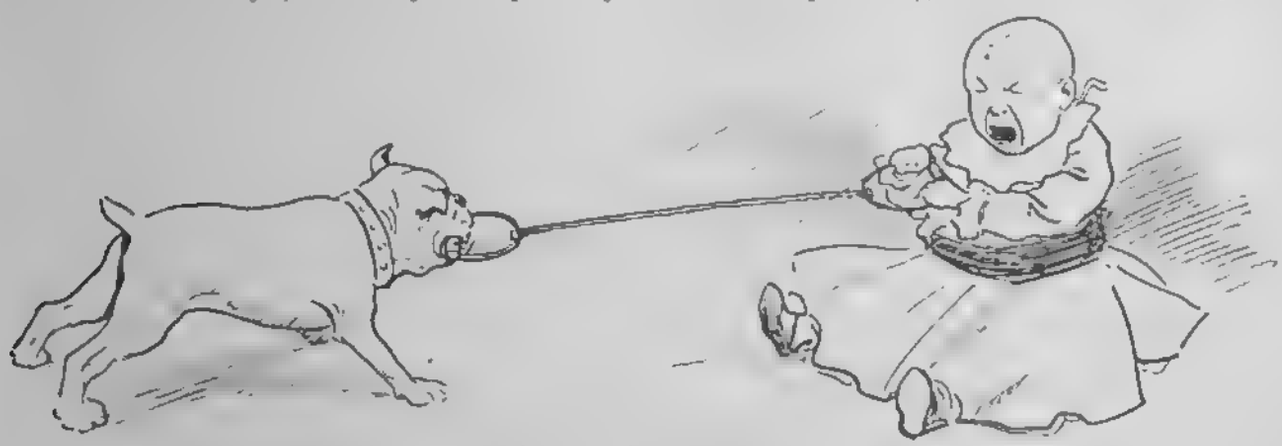
THE ADVANTAGES OF LAWN TENNIS.

The advantages of lawn tennis lie in the uprightness of figure necessary for batting the ball, and in the waist exercise that is constantly practised in picking it up. The value of the waist drill is, however, entirely lost if tight corsets are worn, or even corsets which may not be actually tight when the body is erect, but which quite prevent any real freedom of movement about the waist. Stooping under these fettered conditions resolves itself into weariness and discomfort rather than acts as a healthy exercise; therefore, when lawn tennis is played, not merely as an amusement but also with the view to improving the figure and health, no whalebones or steels should enter into the composition of underwear, but the ordinary corset be replaced by an unstiffened or coutille bodice.

SWIMMING.

Of all exercises swimming is the one which may be regarded as the finest, for it calls into play all the limbs and muscles, and does not only affect one part of the body, the exercise it brings about being evenly distributed over the whole. With many exercises one set of muscles is called into violent use, while others remain unaffected, but with swimming this is not so. Horse-riding and cycling do little for the expansion of the chest, though they may have advantages in other ways, but for many reasons they cannot be considered ideal exercises. The ideal exercises, in fact, cannot be performed while sitting.

Rhythmic gesture of the body and the limbs is what should be aimed at in the choice of exercises, and is what the Swedish system of physical drill



DOGGED RESISTANCE.

advocates, for which reason it is so good for growing girls.

SOME SIMPLE GYMNASTICS.

The following are a few simple gymnastics worth practising night and morning, and requiring no paraphernalia :—

1. Describe a circular movement with each arm twenty times in succession. Extend the arms forward, outward, and upward thirty times in succession, taking eight or ten deep inspirations between each series.

2. Execute a circular movement from the waist, swaying the upper part of the body slowly round thirty times, the hands resting on the hips.

3. Extend one leg at right angles with the body, or as nearly at right angles as possible, twelve times, first towards the front and then towards the back, without letting the foot touch the ground. Take eight or ten deep inspirations between each series. Exercise the other leg in the same way.

4. Bend slowly to a sitting posture, raising the heels from the ground as the body descends, and keeping the back stiff and straight all the while. Rise slowly and repeat the exercise.

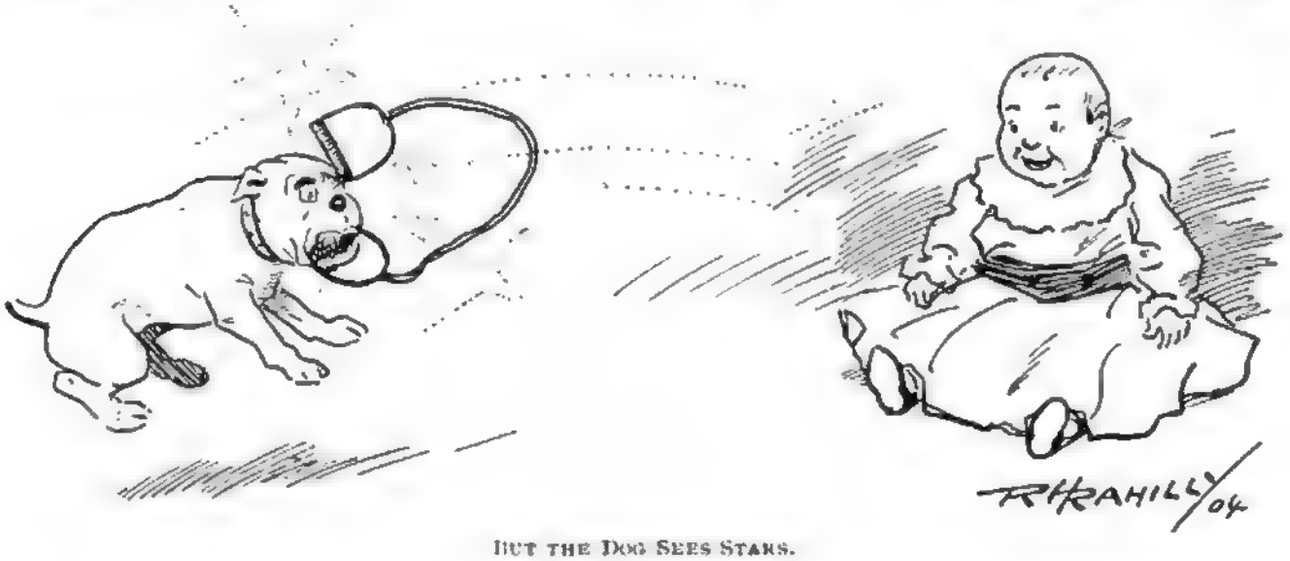
5. Raise one arm swiftly and forcefully, as in the action of throwing a lance, twelve times in succession; exercise the other arm in the same way, and then throw forward both arms simultaneously, shooting them backwards and forwards twenty or thirty times.

6. Trot on one spot about fifty times in succession, resting the hands on the hips and lifting the feet briskly.

7. Jump, with the hands on the hips, and the head and body erect, for fifty times in succession.

THE BEST TIME TO EXERCISE.

The value of these exercises depends much on the heartiness and thoroughness with which they are performed and the time chosen for their performance. Before breakfast is the best time to exploit them, otherwise shortly before the midday meal, and they should be repeated before retiring for the night. On no account should physical drill, swimming, or any such exercise be attempted until at least an hour and a half after a meal.



BUT THE DOG SEES STARS.

A writer in *Vanity Fair* wants to know what has become of that familiar figure of years ago—the masher. That is easy. The Physical Culture movement has killed him.

"It is a good many years," says the writer in *Vanity Fair*, "since I was in England, and he (the masher) has apparently disappeared as if he had never been.

"The exaggerated collar and cuffs, the squared elbows, and the eyeglasses—in short, all the at one time familiar make-up that was the boon of the comic newspapers—where are they? Personally, I liked him. There was a certain underlying asceticism in his nature. Not the most sultry July day could tempt him in London to discard his shiny top-hat and painfully stiff collars; no national calamity quicken his pace along Piccadilly.

"He was an ass, but a Spartan ass, and his aspirations were to appear more of a man than Nature had seen fit to make him."

Clothes Influence the Mind.

That clothes have a distinct effect on mind and morals is a well-known psychological fact. Thos. Carlyle gave us the philosophy of clothes in *Sartor Resartus*. Now the influence of dress upon the feminine mind is shown by the replies that have been made by the scholars at a large ladies' school to the query, "What are the thoughts and feelings produced by various kinds of clothing?"

In the majority of cases soft dress materials are said to produce a dainty feeling; while some say they feel when so dressed talkative, happy, demure, light, graceful, girlish, gentle, refined, etc.

Stiff clothes, on the other hand, make them feel uncomfortable, awkward, formal, and self-conscious, bold, walled-in, etc.

To the majority of the young women rough dress materials impart disagreeable sensations which are very marked. One says it produces a feeling of creepiness, another says it makes her cross, while a third remarks she feels a shiver every time she touches a rough material.

On velvet materials there is a difference of opinion; one remarks that the feel of velvet gives her the creeps, another has cold chills running down her back every time she comes in contact with velvet.

On the subject of furs there is also a difference of thought and feeling. Some say that when dressed in fur they feel proud, well-dressed, wealthy, elegant; others feel hot, choked, stuffy.

Hats also came under examination (adds *The Tailor and Cutter*), and the general verdict is in favour of broad, light fancy hats, which some describe as making them jolly, coquettish, and comfortable.

Watch as Compass.

When we get sunshine again it may interest holiday-makers in using a watch as a compass.

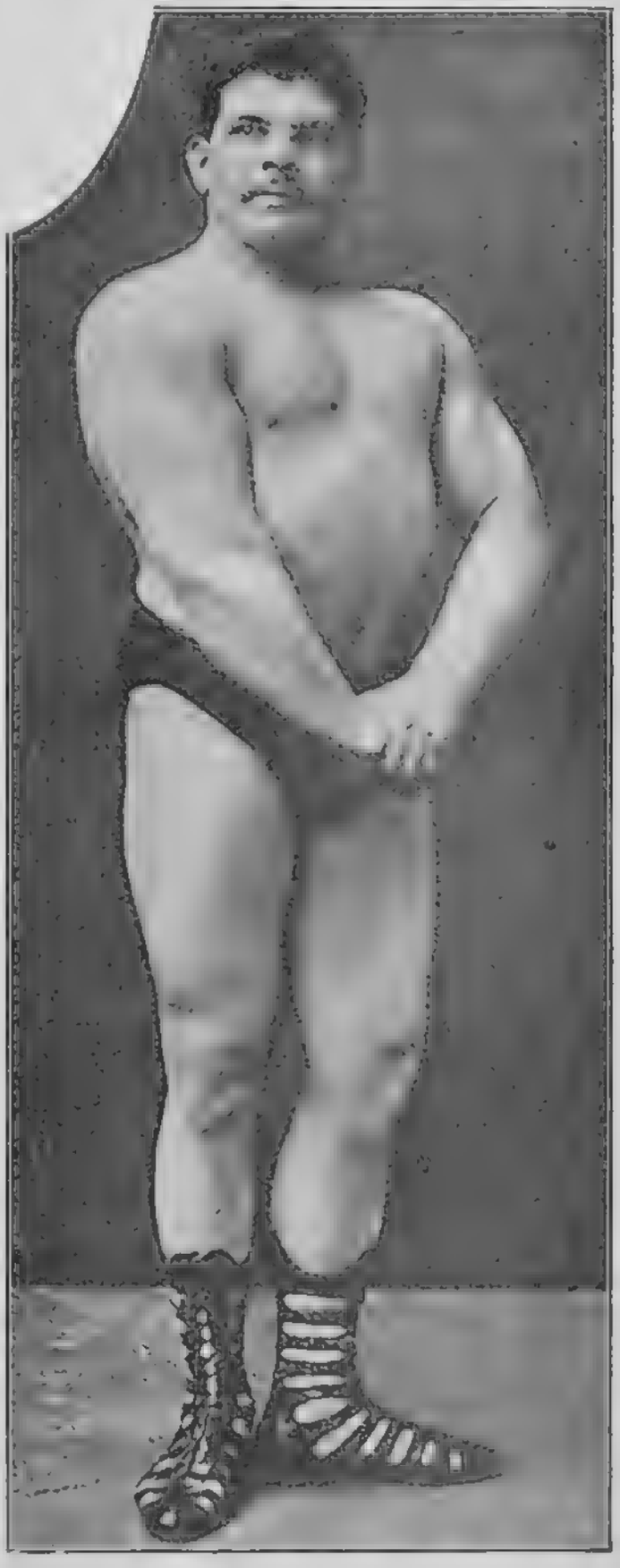
Place the watch perfectly level on the palm of the hand face upwards, and turn it until the hour-hand—the "little finger"—points to the sun, or rather to that point of the horizon over which the sun is.

The south will be half-way between the figure to which the little finger is pointing and the figure XII., counting forward to the figure XII. before midday, and backwards to the figure XII. after midday.

Thus, at 6 a.m. the figure IX. indicates the south; at 6 p.m. the figure III.

Olympiers' Success.

The Olympiers, with whom an interview appeared recently, have caught on in London, with the result that Moss's Empire Theatres have engaged them till January 15th, 1907. During the remainder of 1907 they will appear in America, returning to England for the whole of 1908.



OSCARD ATTILLA

SPINAL WEAKNESS IN CHILDREN.

[The following article deals with a subject of the utmost interest to all parents. It is a thoroughly sensible and agreeably expressed piece of advice, and originally appeared in the columns of that bright periodical for ladies, "Woman." I reproduce it with the hope of giving it still further circulation, and I should like to see it reproduced in every periodical devoted to mothers.—THE EDITOR].

"SIT up, my dear girl, you will be a hunchback; sit up, hold your head up," and so on does one hear a mother talk to the wearied child. The latter straightens herself for a minute, but sinks again into her former position. Girls are more liable to weakness of the spine than boys, and it is this weakness which gives them the awkward appearance so common in young girls of thirteen to sixteen, and which causes the mother so much anxiety and vexation. But in this, as in other children's ailments, prevention is better than cure, and it is not when the child has attained adolescence that mothers should worry about their crooked backs; it is when they are babies in long clothes that the straight back and good deportment must be cultivated.

EARLY DAYS.

Start at the beginning, and do not let your nurse carry the young infant always on the same arm. Most nurses carry an infant on the left arm, but mothers should insist on the baby being carried alternately on either arm. When the baby begins to walk, watch the little one carefully, never allowing her to stand with her weight on one leg or sit with one knee crossed over the other, or perch on the edge of the chair. Sitting well back on the chair will help to prevent stooping. Make sure that both legs are the same length, also the arms, and that one shoulder is not higher than the other. This is most important, and very often neglected until it is too late to counteract the malformation. When the child goes to school insist on her having physical culture exercises, so that both arms and shoulders and internal muscles get a fair amount of work, otherwise the right arm will have an unequal share of exercise and the left shoulder will droop.

TEST EYES AND SPINE.

Children's eyesight should be occasionally tested so as to prevent the necessity of stooping over the paper or book. Mothers also should make a rule of examining their children's spine at regular intervals. This is very easily done when the child is in her bath, and the best way to see exactly the shape of spine is to wet the fingers and run quickly the thumb and first finger all along the joints, pressing them firmly on the bones. This will create a red line caused by the rush of blood to the surface, and according to the straightness or curvature of the line, the mother will ascertain whether the child's spine is right or not. This ought to be done every three or four months, especially between the ages of twelve and sixteen.

FOOD.

Children at that age, whether girls or boys, ought to have plenty of good nourishing food, as they generally do a good deal of mental study, the brain, therefore, absorbing most of the nourishment provided by the food. The general health should be carefully watched, and outdoor sports and exercises limited to the amount of strength of each child; although plenty of fresh air, in fact, living out-of-doors as much as possible, is absolutely necessary for growing children, and is the best preventive against weak spines and stooping bodies.

REMEDIES.

If, however, the signs of round shoulders still persist, the child should have

gentle upward massage of the spine every morning after a tepid bath and a cold sponge down the back. A special chair should be provided, the back of which should incline at an angle of 120 degrees to the seat, and should be high enough to support the entire spine. The seat should be slightly less long than half the child's thigh and about the height of the child's legs from the ground. It should be sloped backwards at an angle of 10 degrees, and the child must sit well back. The distance from the seat to the top of the desk or table should be one-eighth the height of a girl and one-seventh that of a boy. The feet must be supported by a ledge inclined at an angle of 20 degrees.

EXERCISE.

Swimming is an excellent exercise for the strengthening of the spine, especially if the breast stroke is practised. Singing under a good mistress with proper breathing exercises is also extremely beneficial. As a last word of warning, I will entreat mothers never to put their children into those instruments of torture called "jackets," except in cases where the deformity does not yield to treatment and the child is in pain, and then, of course, only on a doctor's advice. Do not encourage artificial supports, but strengthen the muscles by judicious exercises and proper treatment.

A Student of Physical Culture.

Antithetical Advice.

Drink less, breathe more; eat less, masticate more; ride less, walk more; clothe less, bathe more; worry less, work more; waste less, give more; write less, read more; and last, but not least, preach less, and practice more.

More Barber Shop Dangers.

Dr. Milian, of Paris, recently stated at the Anti-Quackery Congress that only those who were free from the slightest physical imperfection escaped the gratuitous advice of the barbers and hairdressers, whose trade consisted in selling lotions, pomades, etc., always expensive and often dangerous, for various forms of skin disease, pityriasis, baldness, etc. These lotions, says *Science Siftings*, sometimes contained pilocarpine and corrosive sublimate in highly poisonous quantities, and many severe cases of skin inflammation had been caused by their use. Another source of danger was the sale of lotions with a basis of ether; they were highly inflammable, and the public had already been warned about them by the police. Hair dyes were also frequently injurious, especially the black dyes, which generally contained paraphenyl-diamine. This substance produced a very violent skin inflammation, in certain predisposed persons, and hairdressers themselves were apt to suffer after applying it to their customers. The eruption was often accompanied by an enormous increase of saliva in the mouth, also severe constitutional symptoms. Another serious matter was the adulteration of cosmetics. Rouge, for example, was harmless were it coloured with carmine, but carmine was expensive, and cheap substitutes were commonly employed, often with disastrous results.

Slaves to Stimulants

Only those who have never made the attempt will expect an easy task in rescuing the nations that are sunken in the slavery of stimulants, but, adds a writer in *The National Review*, whether accepted or not, knowledge of cause and effect is itself a power for good, and while there is life I suppose it may be said there is a certain amount of hope.

"I have just arrived back from leave, and I am very thankful to you for sending the Fellowship Medal to me. It has given me great encouragement to go in for the gold one, and I intend to give someone a good run for it when I enter."—OWEN CONNELLAN (1st King's Dragoon Guards, Aldershot).

THE LIVER BRIGADE.—A Morning Scene in "Rotten Row."

THERE was, a good many years ago, when people concerned themselves with these things more than they do now, an acute controversy whether "Rotten Row" was a corruption of "Route du Roi" (the King's road), or was derived from "rotterau," to muster, a military origin which, it was pointed out by those who adopted this view, might refer to the Park during the Civil War. Probably nobody, unless he be a foreigner of archæological tastes, armed with a handbook, who goes to the Row nowadays, cares a button how it got its name. He is content to know, if he be a patriotic Briton, that it is the finest artificial riding track in the finest park in the finest city in the world. On the first of those points at least everybody may be agreed.

Rotten Rows are not built in a day. As the traditional gardener of the Oxford College explained to an inquisitive American who wanted to know how the velvety texture of the lawns was produced, "Oh, we rolls 'em and we mows 'em for five or six hundred years, and there you are." "The Row" has not been the product of many centuries, but it is certainly more than a hundred years of age. A ride, longer than the Row, might easily be "laid out anywhere," given the ground and the money—in Central Park, New York, for instance, or in Chicago—but you can't grow stalwart, umbrageous trees in five minutes, and it is just this avenue of spreading limes which makes "the Row" unique. Take your stand just opposite Hyde Park Corner, in the early morning for preference, when the traffic in "the Ring" is meagre, and in July, when the trees are in their freshest summer garb, and you will be rewarded with a vista of undulating avenue, which cannot be matched, certainly in any city. You can see almost as far as the Albert Memorial, where the ride turns round by the Prince of Wales's Gate, to rejoin "the Row" proper near the Albert Gate, and if the prospect does not make you wish immediately to mount anything in the shape of a horse and to canter away into the far distance, it is certain that your tastes are not equestrian. "The Row" is the one place within the four-mile radius where you may put your horse at the gallop without inviting the attentions of the police, the only place, indeed, where you may indulge in a canter with comfort, for the narrow strip in the Green Park available for this exercise scarcely counts.

The Park, ever since it has been a park, has always been a favourite place for riding, and probably when horses were allowed on the turf it was even better accounted than it is now. To-day, when the whole ride is laid down with a fine loose gravel mixed with tan, which is constantly being harrowed and raked, so that it shall present an even surface, there is more or less a suggestion of the riding-school about the Row. It is a magnificent, glorified riding-school, no doubt, and to many who frequent it the prospect of something soft to fall upon is alluring, but it does not offer the delights of boundless springy turf. Still, the ordinary frequenter of the park must be glad that equestrians are confined to certain limits. It might clear the park of sleeping tramps if horses could be ridden in any part of it, but nursemaids and their charges would also have to go, as well as a good many other visitors, so it is perhaps just as well that things are as they are.

But in Georgian times there was turf where now there is tan and gravel. We hear of Colonel Newcome, just home from India, finding "a fine occupation in breaking a pretty little horse for Ethel Newcome, of which he made her a present, and there was no horse in the Park

that was so handsome, and surely no girl who looked more beautiful than Ethel with her pretty hat and red ribbon, with her thick black locks waving round her bright face, galloping along the ride on Bhustpore. Occasionally Clive was at their riding parties, when the Colonel would fall back, fondly surveying the young people cantering side by side over the grass." You may see Clives and Ethels doing precisely the same thing nowadays, only the grass has changed to tan; and if you looked long enough you might perhaps see a Colonel Newcome in the flesh. For one is glad to think that he really exists, though rarely.

But you see other horsebreakers besides colonels. According to a writer of thirty years ago or so, there were women who used the row for this purpose, for on a lament on decaying manners—he was probably an old fogey who had seen the birth of the century—he says, "In those days"—the late Georgian—"pretty horsebreakers would not have dared to show themselves in Hyde Park, nor did you see any of the lower or middle classes of London society intruding themselves into regions which, by a sort of tacit understanding, were then given up exclusively to persons of rank and fashion." Well, we have changed all that, and quite rightly. Anybody may ride in the Row to-day, whether he or she be "in the movement" or outside of it. One is not sure whether a coster be within his rights if he wanted to take a ride in "the Row," but certainly nothing in the shape of a hackney could be "warned off" the tan. Horses are constantly tried and exercised by dealers, though this generally takes place in the quiet hours when Society does not think it correct to appear. Fashions in this as in other things change. About the middle of the last century it was considered unpardonably vulgar to put in an appearance in the Park before the afternoon. Now again it is the custom for the most exalted persons to take a morning ride. Probably in the fifties of 1800, people had not discovered that they possessed livers. When they did make that discovery and began to talk about it, horse exercise was recommended by Harley Street as a cure for congestion—hence the "Liver Brigade," which came into existence then and still flourishes. And it is likely to go on flourishing, for there can be few better preparations for a day's work than half an hour's canter in the Park. Politicians, judges, barristers, actors—all kinds of men who live sedentary lives—are to be seen taking their medicine between half-past eight and half-past nine in the morning, and if they could only get some of their colleagues to join them, perhaps legislation would be easier of achievement, the wheels of the law would move a little more quickly, and there would not be so many hopelessly bad plays produced. It is pretty certain that in the old days there were no actors riding in Hyde Park, just as there were no horsebreakers for, at least, any actor who attempted to do so might have been dealt with as a rogue and vagabond. Now we make knights of them, and they are invited to Royal garden parties.

The annals of the past, says *The Chronicle*, are full of references to famous figures to be seen in the Park. Thus in his day, just a century ago, the most conspicuous horseman was the Prince Regent, always accompanied by Sir Benjamin Bloomfield. Then there was the Duke of York, who, when he couldn't get a hill to ride up and down again, was content with the Row. And the Duke of Dorset, who was always mounted on a white horse. Even dukes had to commit some eccentricity in order to make themselves distinguished. Captain Gronan says of the Park that, as lately as the date of the Battle of Waterloo, when there was a great fête there in celebration of the victory, it looked a part of the country. Under the trees grazed not only cows but deer, and the paths across it were few and far between. As you gazed from an eminence, no rows of monotonous houses reminded you of the vicinity of a large city, and its atmosphere was then "much more like what God made it than the hazy, grey, coal-darkened half-twilight of the London of to-day." This account was written nearly sixty years ago, and if it presents a faithful picture of what the Park was then, it has surely changed

for the better. Nobody who visits the Park on a fine morning can complain of the atmosphere; there are few traces of the hand of man about it, not even in the shape of petrol vapour; and as for "the rows of monotonous houses," scarcely any part of London presents greater varieties of architecture than the fringe of Hyde Park when you can see it through the trees.

At this time the company, which then congregated daily about five, was composed of dandies and women in the best society; "the men mounted on such horses as England alone could then produce." The dandy's dress consisted of a blue coat, with brass buttons, leather breeches, and top-boots; and it was the fashion to wear a deep stiff white cravat, which prevented you from seeing your boots while standing. All the world watched Brummel to imitate him, and to order their clothes of the tradesman who had the privilege of dressing that sublime dandy. One day a youthful beau approached Brummel and said, "Permit me to ask you where you get your blacking?" "Ah," replied Brummel, gazing complacently at his boots, "my blacking positively ruins me. I will tell you in confidence; it is made with the finest champagne."

Earlier still, about the middle of the eighteenth century, one of the most constant frequenters of the Park was Lord Chesterfield—"The man of the Graces." That nobleman late in life had a severe fall from his horse, which took fright whilst drinking at one of the little ponds in the Park. A few days before his death, it is related, one of his friends expressed some astonishment at meeting the famous letter-writer there, considering the precarious state of his health. "Why," replied Chesterfield, "I am rehearsing my funeral," alluding to his own dark-coloured chariot, drawn by four horses, and the string of fashionable carriages which followed behind.

Here Horace Walpole, as he tells us, was robbed in the winter of 1749, when he was returning from Holland House by moonlight about ten o'clock, by two highwaymen, one of whom was the celebrated Maclean. Such were the perils of the Park within a quarter of a mile of Piccadilly in the reign of the second George. Hyde Park had undergone many changes; it will probably suffer many more; but as long as there are horses in England it may safely be prophesied that the Row will continue to exist.

Fashionable Starvation.

There is another dietetic scare abroad just now. We are never suffered to be long without one, and perhaps it is because we are continually being swayed this way and that way that we manage, after all, to keep our balance.

Having been solemnly warned against overeating, and reduced, practically speaking, to the dietary of the Frenchman's horse, we are now (remarks "Ambrosia" in *The World*) being emphatically warned that we are in great danger of being underfed. There may be nothing in the new theory; but, in any case, it will serve to prove the wisdom of steering a middle course, which, put in its plain terms, means eating neither two, nor six, but three meals a day, of moderate proportions, which very few of us do. Either we diet ridiculously, or we eat excessively, and then "cure" for six weeks.

The Acrobat's Plea.

It seems hard that a man should be fined £2 for making his children muscular.

At Paris recently an acrobat was summoned on a charge of breaking the law for the protection of children employed in travelling shows, by subjecting his six children to physical exercises tending to the dislocation of their limbs.

All the six children were brought into court and seated in a row before the magistrates. When asked if he had anything to say in self-defence, the acrobat pointed dramatically to his offspring, and said: "There they are, my six children, whom I make work with me. See for yourselves that they are in good health and well-fed. Feel their muscles!" And the six stretched out their arms and showed their muscles, which were so satisfactory that the court inflicted a fine of only £2 and released the prisoner.

Ireland for Long Life.

Notwithstanding all her comparative poverty, hardships, and grievances, Ireland remains the land of centenarians. As many as 182 persons aged 100 years and upwards died during 1904. The women centenarians were the more numerous—there were 96 females to 86 males. Persons aged 95 years and upwards who died last year numbered 711.

These figures are given by the registrar-general in his annual report. Another curious fact illustrating the stamina and longevity of the Irish is that sheer "old age" instead of any specific disease was the cause of death in 9,840 instances; old age, indeed, ranks as high as second place in the classified causes of death.

SHOULD BOXING BE ENCOURAGED?

New York Sheriff says it produces Clean, Moral, Manly Men.

AS an officer of the law, says Nicholas J. Hayes, Sheriff of New York, I am prepared to do any duty that presents itself, and while personally I am in favour of boxing as a sport, I do not see any other way for the enthusiasts of the game to act but abide by the decisions of those who have the enforcement of the law as part of their day's work.

That boxing is a good sport no one who is familiar with it will deny.

The growth of athletic sports and pastimes in America is a healthy move in the right direction, and nothing gives it stronger impetus than boxing.

Boxing exhibitions, when conducted as they have been in New York since the new law allowed the clubs to give exhibitions, is a spectacle that does no one harm. Boxing as handled by the professional exhibitors teaches fairness and puts a ban on trickery and cowardice. It promotes a spirit of self-reliance and gives the masculine mind an impression of activity and aggressiveness that the masculine mind should possess.

It is a kindergarten in which the object lesson is clean living. Here's a sample incident that I overheard in the club-house in our district the other evening.

A young fellow who had some ability as a boxer decided that he wanted to be a professional boxer, and put himself under the care and direction of a well-known trainer of athletes. He started out with enthusiasm, and I heard of him from time to time. The other evening he was seen going by the club-house, and one of the members remarked that his relations with the trainer had been short. I enquired what the trouble was, and was informed that the trainer would not have anything to do with the young fellow because he couldn't get him to stop smoking cigarettes.

THE AMERICAN POSE
Ready to Drive either Left or Right.

I can point out in our district half a hundred young fellows under eighteen years of age who live the cleanest of lives amid the surroundings of poverty and the temptations of the saloons each and every one of whom hopes to be heard of some day as a boxer.

The saloon men tell me that in the past few years there is a decided change in the habits of the young fellows who use these places as their general meeting places, and it is directly due to the spirit of boxing. My informant tells me that when two or more young fellows get together nowadays the conversation is sure to turn to this "boy" or that "boy" who has gone off in his "foot work," who has taken on fat, and who has "gone back" or "got slow." The talk of condition and keeping down to weight is heard on every hand, and, what is more important, this talk occurs over glasses of sarsaparilla and other inoffensive liquids rather than the pints of "mixed ale" or stronger things.

The tendency to keep in condition because it's the thing to do is certainly a condition itself to be commended, and when a young fellow goes to a boxing contest or two and sees what it means to be in condition, he begins to think about himself.

There is something about it that appeals to the masculine in him and to his vanity at the same time.

Any condition that tends toward abstinence from cigarettes, alcohol and late hours is a good one, and that is what boxing does.

In a big city like this (New York), where so many people like the sport, it seems strange that they are not able to get the laws preventing the sport done away with.

A minister who likes the sport once said to me when we were talking of boxing: "You can't get recognition for boxing, because women are not interested in it, and nothing that women are not interested in can ever hope for much recognition." And yet there are a very few women who do not individually admire the idea of boxing.

The audiences that are seen at the important bouts in this city are as representative as any body of men could be, lacking only ministers to make them as cosmopolitan as any gatherings that assemble in the city, yet I dare say few of the men who are enthusiastic and representative of important affairs in this city would care to lend their names to a movement to make boxing a wide-open sport properly regulated.

It is a far different thing to go and sit in an audience and watch two clean-looking, athletic fellows box, and go away with the sense of masculine aggressiveness stimulated, and generally satisfied with the time spent, and to have to lend your name to a movement to legalise a thing that bad usage and mismanagement have put in the sentimental category of brutalities.

Some day, when enough people have learned just what the so-called prize-fighting really is, there will be no objection to regulated boxing, and we will be able to safely and decently go to a comfortable hall and see good boxing bouts without the fear that we'll be talked about among the neighbours, just the same as we go to football games now, which are far more brutal than any prize-fight could possibly be.

Hot-Water Justice.

A curious attempt to mislead the magistrates, which in all probability would have been successful but for the accident that a medical man was among those sitting, was made at Leicester recently. A woman proceeded against a school teacher for an alleged assault on her daughter, aged ten.

It was alleged that the teacher gave the girl a very severe blow on the left hand with a cane, and the girl was shown to have a very heavy black mark. The doctor on the Bench very carefully scrutinised the hand, and then ordered a Court official to wash it with hot water.

This having been done and the child brought back into Court, it was seen that the mark had entirely disappeared. The mother said she could not account for this, and the magistrates dismissed the case without calling on the defence, remarking that it should never have been brought.

"I received my Fellowship Medal quite safe, and I am very proud to have gained one. I have shown it to my companions and readers of your Mag., and they greatly admire it."—W. McDERMOTT (Bolton).

"Fellowship Medal arrived this morning; many thanks for same. It is a little beauty."—R. GORDON (Leith).

THE EFFERVESCING BEVERAGE.

ARTIFICIALLY aerated waters are a comparatively modern invention and were suggested, no doubt, partly by the occurrence of natural sparkling waters and partly by the effervescent quality observed in fermented liquors in which the carbonic acid gas evolved was allowed to collect under pressure. Whatever may have been its origin, the discovery of artificial aerated waters, as exemplified in the universality of soda-water, seltzer-water, and potash-water, proved to be the beginning of an enormous industry, and millions of dozens of aerated waters are now made annually, involving the employment of probably at least 50,000 persons in this country alone. This fact, coupled with the numerous devices which enable the consumer to prepare his own soda-water at home, would seem to indicate that the introduction of aerated waters filled a place in the requirements of modern life, and the question arises as to whether the frequent drinking of waters strongly impregnated with carbonic acid gas has any prejudicial effect upon the health of the economy. It is an interesting feature of the case, says the *Lancet*, that total abstainers formed at one time the chief patrons of aerated beverages. The pleasant, sharp taste, of soda-water, lemonade, and so forth, formed an agreeable contrast to the usual drinks of the teetotaler.

COLOUR-SERGEANT ROSE, an Army enthusiast

THE LEMON-SQUASH

made with soda-water was a much more interesting beverage than still lemonade, and so "the minerals" made a very acceptable addition to the beverages of a class of persons whose views we all respect. But undoubtedly the present popularity of whisky is very closely connected with the demand of an aerated beverage. There are scores and scores of persons who would never have cultivated the taste for whisky unless they had had the opportunity of mixing it with soda-water and converting it into an effervescing beverage. Soda-water has increased the sale of whisky enormously. The man who drinks whisky for the sake of its flavour rarely mixes it with aerated water. A bubbling liquid, endowed, moreover, with stimulating properties, proves to be a singularly attractive beverage, and harder to resist than the non-sparkling fluid. What is this charm of effervescence? Champagne would be miserable stuff without it, and beer that is not brisk is not only unattractive but unwholesome. Probably there are two reasons for it: first of all carbonic acid gas gives piquancy to a beverage, a briskness to it and an acid taste; moreover, effervescence implies freshness, and the eye is pleased with the continuous succession of tiny bubbles upwards through the liquid. Secondly, there are reasons for believing that the effervescent properties of a liquid promote digestion in two ways: firstly, by the carbonic acid acting as a stimulant to the movements of the stomach, and, secondly, by assisting in the disintegration of the contents of the stomach.

CERTAINLY THE ALCOHOL

in an effervescing liquid is more rapidly diffusible than in a still liquid. Champagne

exhilarates more quickly than is the case with still wine. On the other hand, it may be undesirable to distend the stomach with so much gas—seeing that distention may lead to the embarrassment of the heart's action. It has also been stated that carbonic acid gas is rapidly absorbed from the stomach and that it may thus induce a condition of cyanosis, in which an excess of this gas is invariably found in the blood. In certain cases, therefore, the use of aerated water should be avoided. On the whole, however, it is probable that the moderate indulgence in pure aerated water is not only without prejudice to the health, but serves as an aid to digestion when such help is needed. The frequent consumption of immoderate quantities of aerated water may safely be condemned, as such a practice undoubtedly has possibilities for evil.

The Tonic Air Bath.

It is said that Benjamin Franklin was an enthusiastic advocate of the air bath, and that he was one of the first of modern philosophers to call attention to its value. His method of employing this tonic was very simple. It consisted in exposing the skin to the action of the air by removing the clothing and walking about in his apartment. This form of air-bath corresponds to the immersion water-bath. Its effect depends upon its duration, the temperature of the air, and its rate of movement. The very best effects are obtained by means of vigorous rubbing combined with exercise. The bare hands should be used, and when it is cold the results are even better than otherwise, while the hand itself is warmed in the process. The rubbing should be made hard work, and should be continued until the skin is smooth and warm, which should be within one or two minutes.—DR. FRANKLIN RICHARDS, in May *Good Health*.

Navy Rejects American Meat.

During the recent naval manœuvres the crew of one of the ships in the Atlantic Fleet refused to accept the American tinned meats, which hitherto have been a recognised ration in the British Navy. At the conclusion of the manœuvres the circumstances were reported to the Admiralty.

Orders have now been issued directing that ships' companies shall not be compelled to take up American tinned meats, but in lieu thereof may be supplied with Australian and Argentine tinned meats.

The King has sent a framed autograph portrait of himself to the Army gymnastic staff at Aldershot, to hang in their mess-room.

Club Swinging Extraordinary.

Tom Burrows has just performed an extraordinary club-swinging feat at Buenos Ayres, swinging 4-lb. clubs for 61 consecutive hours. Barring the fatigue consequent upon the strain of keeping awake for so many hours, Mr. Burrows seemed almost in as good trim at the end as he was at the beginning, every muscle acting with the precision of a machine, and performing its allotted task to perfection. At half-past eight in the evening, McRay, looking fit and well, and having all the appearance of a most formidable antagonist, entered the lists to attempt to wrest the championship of South America for fancy club swinging from the man who had at that time already been swinging without a rest or pause for a matter of 57½ hours. To the strains of a slow waltz, the two athletes started the exhibition, each of them doing his work well, the clubs wielded by both manipulators tracing graceful and intricate curves and keeping perfect time to the music.

McRay started quickly doing "outward circles," "parallels," and "windmills" with variations, while Burrows went some 14 revolutions slower, but keeping splendid time with the music, and from the start showed himself a greater master of variety than McRay, "glides," "rolls," under and upper "back circles," outward and inward circles, "parallels," and "windmill" movements following each other in rapid succession. About half an hour from the end, Burrows looked very bad, though his revolutions were as regular as ever, but he "bucked up" and finished well, going as fast as McRay, but with a much greater variety of revolutions.

Marks were given for time, style, and execution. They both secured equal marks for time, and McRay one less for execution, but Burrows fairly walked away in the matter of style, getting a lead of six marks out of ten. Both "touched" twice, getting two bad marks each. Burrows was cheered at the end of each hour, and that his win was a very popular one was evident by the storm of cheering which greeted the referee's (Mr. H. Brookhouse) announcement that Mr. Burrows had won the championship of South America.

At the finish of the 61 hours, Mr. Burrows was mounted shoulder high and carried to a coach, whither he went to a Turkish bath. After the strain was once over Mr. Burrows was very weak, but was able to take an intelligent interest in things and persons around him.

No Cigarettes, Better Boys.

In the Swiss Canton of St. Gall smoking was prohibited not long ago among boys under sixteen. Schoolmasters now state that the standard of work in the higher classes had considerably improved since.

"Allow me to thank you for the Fellowship Medal, with which I am highly delighted. The design and workmanship is perfect, and the honoured recipient ought to prize it as highly as any other of his or her possessions."—G. C. HODGSON (Sunderland).

ROWING AS AN EXERCISE.

[The holiday season is now in full swing, and thousands will find their chief amusement in rowing. The following excerpt on rowing is taken from Mr. A. Maclaren's well-known work on "Training in Theory and Practice."—EDITOR].

ROWING is the chief of all our recreative exercises; no other can enter the lists against it; in fact, it has collected and concentrated in itself all the attractions and all the emulative distinctions of all others: just as the boat-race admits of more amicable rivalry and friendly competition than all our other national pastimes put together. The *physique* of the men forming the crews; their enthusiasm, so generous and so contagious; the crowds of spectators who go to witness the races with enthusiasm no less strong, and certainly no less demonstrative, than that of the rowers; the flag distinctions, colours and costumes; the barges, music, and beautiful river itself, all tend to give an *éclat*, an importance, to this exercise, unapproached by any other, and to give to it the first place in the front rank of recreative exercises.

The numbers who come down to the river-side, to witness the sport in the summer evenings, testify to the extent to which the enjoyment is shared; and there is not a man on river-bank or barge whose eye does not kindle, nor a lady whose cheek does not mantle up, when the hoarse continuous roar comes on and on, and the crowd sways to and fro, and the boats rush by.

Rowing as an art has made great advancement of late years; vast improvements have been made in the build of boats, the construction and disposition of propelling and steering gear, and also, and notably, in the mode of propulsion—in the "form," as it is technically called, of the stroke. In the first respect in reducing the weight and bulk of the boat, by making the material of which it is constructed as thin and light as possible, and in so fashioning it that the parts submerged shall encounter as little resistance from the water as possible, and the parts above water as little opposition from the air as possible; in the second respect, by a scientific adjustment, on strict mechanical principles, of the shape and proportions of the oar, of its length within and without the rowlock; and of the fashion and disposition of the rowlock itself—the pivot of action of the propelling force; and last, but not least, by an alteration in the mode of executing the stroke; it having been found that a quick short stroke, by which the boat is kept at an almost uniform rate of speed throughout, is a vast saving of propelling power; the difference between this and the old stroke resembling that between an unbroken, even, level run, and a succession of leaps or bounds.

Now, I regret to say that every one of these alterations, while it has undoubtedly advanced rowing as an *art*, has detracted from it as an *exercise*. I shall endeavour to show presently that everything which tends to make the muscular effort less, while making the respiratory effort greater, has this detracting effect; and the above-mentioned improvements in the art all have this effect in the most direct manner. Thus the weight to be propelled is reduced by the lightening of the boat, the water and atmospheric resistance is reduced by its improved shape and construction, the propelling power is augmented by the out-rigged rowlock; while the old-fashioned long swing of the back is discarded for the new high-pressure stroke, by which its duration is reduced, and by which the pressure on the organs of respiration and circulation is intensified in proportion to its increased rapidity. In fact, a boat-race has now become a matter of wind rather than of muscle, and, as an old waterman at one of our races last year remarked in my hearing, "That crew that can bucket it the fastest will win the race, *if they don't bu'st.*"

But is not the exercise, the mere muscular exertion of the race, still very great? The exercise in rowing a College race (a short mile) is barely sufficient to keep a healthy man well; it is not sufficient to keep up the condition of a strong one. This is shown to me every year. The best men fall off when the racing, or the exclusive training exercise for the racing, begins; under it a powerful man dwindles; and this, not from "training down," as the phrase goes, for the reduction is not in weight only, but in girth and tension and contractility of muscle, and in the stamina which gives endurance of fatigue. I know that this statement will startle some of my readers, but it is capable of proof, as I will endeavour to show presently, when I come to examine in detail the chief characteristics of this exercise, and the parts of the body which receive employment from it.

A little examination will prove, I think, what at first may not have been surmised, that the legs have the largest share of work in rowing. For while all other parts employed—back, loins, and arms—act somewhat in detail and in succession, the legs act continuously throughout the stroke, and the individual efforts of each, and the concentrated efforts of all the other parts of the body employed, are transmitted through them to the point of resistance, the stretcher. No doubt the seat presents a point of resistance during a portion of the effort, especially with men still learning to row, or when rowing within their powers; but the true application of the mechanical force, employed in the propulsion of the boat, is between the water-grip of the blade of the oar and the pressure of the foot against the stretcher on the floor of the boat. It will be found also that the stroke is nearly finished before the contractile efforts of the arms are in any degree engaged at that point, namely, when the trunk reaches the vertical line, and they are called in to finish the stroke, and to turn and run out the oar on the forward reach of the body, preparatory to another.

Rowing thus gives employment to a portion of the back, more to the loins and hips, and most of all to the legs; but it gives little to the arms, and that little chiefly to the fore-arm, and least of all to the chest. Moreover, as there is but *one* movement in rowing, namely, the stroke, indefinitely repeated with the most rigid precision, and as it is in the rearward half of this movement only that any real muscular effort is made, or resistance encountered, it follows that every muscle of the body not employed in this action is excluded from the exercise; moreover, also, every muscle included in it is employed but in one line of action, while it is qualified and designed to act in many, and will be developed and strengthened in proportion as these manifold modes of its use are observed; and moreover again, as, with few exceptions, all muscles have antagonistic muscles, designed to perform counter movements, it follows that, as rowing consists but of one motion, the antagonistic muscles of those employed in executing this motion must be virtually unemployed. Thus as I have said, the legs have strong employment in rowing, but it is the *extensor* muscles alone which have actual employment: the *flexors* are comparatively idle; they perform no exercise, they gain no bulk, they obtain no increase in power. They are excluded from the work, they have no share in the reward.

Now, it is the circumscribing of the line of muscular operation, the concentrating of the physical exertion into the narrowest channel, that has brought rowing to its present point of artistic excellence, which gives to the rower that statuesque appearance when resting on his oar, and that automatic precision of movement when in action, which constitute the very ideal of an oarsman, and of a crew.

The part of the body which receives the smallest share of the exercise in rowing is the chest; it has little or no employment in the muscular effort required for the propulsion of the boat; and this is impressively evident in the results. Not only does it make no advance in development in this exercise, but, if it be exclusively practised, an absolutely depressing effect is experienced. No single result of recreative or systematised exercise may be more fully substantiated than

this. Take any crew in the University just as it stands, at any stage of its practice, and it is possible, in a given space of time, by varied systematised exercise, to increase the chest of every man by a given number of inches, with a proportionate development of power; let this cease, and exclusive rowing exercise be resumed, and the progressive development of the chest will also cease; nay, its muscles will lose their condition, and their power will decline, in obedience to the organic law that power is in relation to employment, for here they have virtually none. I could at this moment point to men who have had rowing for exclusive exercise since they came to the University—men endowed with an organisation capable of the finest development, whose chests have been almost stationary for years, the years during which they should have made the greatest advancement, who have now, in fact, the same developments in this region which they brought from school, lingering at 36 or 37 inches, when 40 or 41 were fairly within their reach.

And here I may state that this error of exclusive devotion to one exercise is not confined to rowing, nor committed solely by rowing men; most men have a favourite exercise which they declare is "the finest in the world," and which they aver "exercises every muscle of the body." Now, there is no single exercise invented or inventable by man, which gives employment to more than a part of the body, and to a very small part, too, when closely examined; and none, with which I am acquainted, which gives anything approaching to uniform employment even to the parts employed. The error lies not in men's having favourite exercises; every man ought to have his favourite exercise, in which he excels or in which he strives to excel, in which he takes pride and in which he finds pleasure, just as he may have his favourite author or his favourite object of study; yet not for exclusive reading, if he would have his *whole* mind cultivated or employed; and least of all should such exclusive devotion to one pursuit, mental or physical, be during the period of growth, when ultimate conformation of organ and capacity of function are mainly determined. The error lies in expecting from the exercise what it was never designed to give—what no single exercise can ever be made to give. The human frame is too complex, too powerful in its attainable strength, I had almost said too important, to be so treated. It was designed for greater things, and must have greater care and larger means expended on its culture, than to be turned aside with a single mode of employment. It was fashioned and designed for modes of action without limit, and it is so constituted that its own perfection of development and power will be attained only by a wide and varied range of occupation—so that its own state of health, and its own point of power, will stand in relation to the integrity with which these conditions are observed.

But we may be reminded that a race is not to be won by "brute strength"; and there is truth in the reminder. Skill, however, does not necessarily, or even naturally, accompany weakness, nor does awkwardness necessarily or naturally accompany strength; on the contrary, it will be found that strength is more frequently, more closely, and more suitably allied to skill than to awkwardness. The truth seems to be that strength can sometimes afford to dispense with skill, and can be all in all unto itself; and being seen thus disunited, the union is thought to be unsuitable and the divorce permanent; and as weakness passes not only unopposed, but even unobserved, when by itself, and is noticed only when allied to skill, it has become possible to regard them as natural companions. What is meant doubtless is, that strength alone is not sufficient, it must be strength united to skill—force allied to dexterity; and this is truth, and truth in its most desirable aspect; for the race would soon lose all charm for either actor or spectator if it could be won by weaklings, however dexterous, or by any amount of muscular power if inartistically applied.

It is with the second requirement of exercise, respiratory power, or "wind," that we have now to deal; and first, let us hear what rowing-men themselves think of it.

"Men must run to be put into thoroughly good wind. No other motion removes the internal fat, the great enemy

of good wind. There is no known exercise, adequate to this result but one."

Now, the respiratory organs are almost the only part of the body where fat is never deposited; on the lungs it is never found; and when found on the heart, except in meagre quantities along the interspaces of its fibres, and upon some blood-vessels where it has important offices to fulfil, it is in actual disease, or in that "fatty degeneration" which not infrequently occurs in many of the tissues at an advanced period of life; and that either of these is the normal condition of the youths of our public schools and colleges is surely difficult of belief. But fat is found on the viscera and organs of the lower cavity of all healthy men at this period of life; and at this time of great and often ill-regulated exertion, its protective presence here is as valuable as it was on the surface of the body at an earlier stage of life, when the liability to injury was from falls and similar causes. The only way, as I conceive, in which its presence here could affect respiration unfavourably would be when accumulated in such quantity and bulk as to prevent the due depression of the diaphragm and contraction of the abdominal muscles, and that this is the general condition of rowing-men is, I think, a thing still more difficult of belief than the other.

But the theory of internal fat not only exists, but is believed in, and acted on; and they find the proof of the correctness of the theory in the facts that by running men get thinner and lighter and the wind improves; while it is observed that they perspire copiously, and perspiration, say they, "is only fat in a state of melt." Truly, many a long-venerated theory has had less to support it than this. Nevertheless, it is the text that has given origin to all the false doctrine preached on the subject of training for many a year.

In rowing, as in some other exercises where the voluntary muscles of the trunk, and especially those of its upper region, are strongly exerted, the breath is "held" in the lungs during the muscular effort, in order to keep the chest distended and firm, or, as it is technically called, "fixed," that these muscles may have firm and unyielding points of attachment during their contractile efforts—fixed fulcra for their levers; and when this is prolonged or repeated over any considerable space of time, it becomes a highly disturbing influence to respiration; and doubly so if the exercise be one which greatly augments the respiratory requirement; for the act of fixing the chest is accomplished by retaining the chest at its point of expansion, when in the natural order of respiration it would be collapsing. And while in ordinary effortless breathing, or during exercise where the lower limbs are solely or chiefly employed, such as in walking or running, the inspiration and expiration follow each other in uninterrupted succession—each occupying about the same space of time as the other, and the two constituting the entire process—in rowing, both these acts are hurried over during that time in which the muscles are relaxed, *i.e.*, towards the close of the stroke, and on the rapid forward dart of the body preparatory to another, when the breath is again held and the chest fixed during the muscular effort.

Now, in ordinary breathing the rate is, to a full-statured man, from sixteen to twenty inspirations per minute, while the racing pace is forty strokes per minute; and we have seen that the breathing is regulated by the stroke, giving, therefore, the rate of respiration in rowing at forty inspirations per minute.

But we have also seen that although there is a breath to every stroke, still the double process of inspiration and expiration does not occupy the whole of even this brief space of time, being accomplished during the momentary muscular relaxation towards the end of the stroke, and the forward reach of the body preparatory to another. This greatly augments the rate at which this double process is performed. No need of internal fat to make a man gasp at such work as this!

The British teachers who have been trained and teach the British system of physical training have just formed themselves into a British Physical Education Society, with offices at Southport, and an account of their objects, with which Sir Lauder Brunton is in warm sympathy, has been sent to me. The argument of the society, of course, is that the system of Swedish drill is lacking in life and initiative, and unpopular with the children themselves.

IN THE ARENA OF SPORT.

Australia v. Scotland.

Mr. W. C. Upton, the well-known New South Wales bowler, has accepted the challenge of Mr. W. S. Carmichael, and will meet him shortly to test the merits of the different styles of bowling. Mr. Upton has won many prizes in Sydney and at Geelong, and has invariably played third in Mr. John Young's rink.

Cricketer's Serious Injury.

Fred Huish, Kent's wicket-keeper, will be absent from his county's team rather longer than expected. He is not suffering from lumbago, but has rather badly sprained the muscles of his back (Lattisimus Dorsi muscles), which are badly swollen and very painful.

Commenting on the Inter-Varsity cricket contests, the cricket notes of *The Daily News* says:—

Certain of the University matches have a kind of historic interest. At present the two which are most spoken about are those of 1870 and 1875. In the former year Oxford wanted three runs to win, and had an equal number of wickets to fall. Their supporters were preparing to celebrate their victory, but F. C. Cobden took the last three wickets with successive balls, and Cambridge gained an unexpected victory by two runs. In 1875 Oxford had an almost equally sensational victory. With two wickets to go down, Cambridge wanted only seven runs to win, but at the critical moment A. W. Ridley, the Dark Blue captain, had the courage to go on with lobs, and, partly due to his own bowling, had the pleasure of seeing his side successful by six runs. These matches will always have considerable interest for those who follow the game, and I venture to think that, when hallowed by the traditions of age, last year's contest will take at least equal rank with them. That game, indeed, had a most unexpected conclusion. When the sixth wicket fell in the second innings of Cambridge the Light Blues were 24 runs to the bad, and Oxford had still an innings to play. The match then seemed to be as good as over, but L. G. Colbeck and H. C. McDonell made a magnificent stand, and, with A. F. Morcom afterwards bowling in irresistible style, Oxford were in the end beaten by 40 runs.

Cricketer's Great Feat.

The most sensational cricketing feat of the season was Fielder's bowling in the Gentlemen *v.* Players match at Lord's. Fielder took all ten wickets, a feat never before accomplished in a match of this importance. The only cricketers now playing who have done it are Dr. W. G. Grace—what record is there that this mighty cricketer has not had a hand in?—playing for the M.C.C. *v.* Oxford University at Oxford, in June, 1886; S. M. J. Woods, for Cambridge University *v.* C. I. Thornton's XI., at Cambridge, in May, 1890; and Albert Trott, for Middlesex against Somerset at Taunton, in August, 1900. Among those not now playing who have taken all the wickets are V. E. Walker (three), John Wisden, William Clarke, Wootton, Alfred Shaw, E. Barratt, G. Giffen, James Lillywhite jun., Burton, Richardson, Pickett, Tyler, W. P. Howell, Bland, and Briggs.

The taking of all ten wickets in matches other than Gentlemen *v.* Players is not, of course, unknown; it is not known to have been previously accomplished four times at Lord's—by E. Hinkly for Kent in 1848, by John Wisden for the South in 1850, by S. E. Butler for Oxford against Cambridge in 1871, and by Alfred Shaw for the M.C.C. in 1874. The last occasion in a first-class match of a bowler taking all ten wickets was at Taunton six years ago, when Albert Trott enjoyed that distinction for Middlesex against Somerset.

Cricketers' Nicknames.

"Framjee" was the nickname bestowed on Henderson, the Surrey professional, because he went to India to coach the Parsees. Aubrey Smith—now better known as actor than as cricketer—was dubbed "Round-the-corner Smith," because of his peculiar bowling delivery.

Spofforth and Turner, the Australians, were respectively entitled "the Demon" and "the Terror," and Robert Abel is "the Guv'nor," H. D. G. Leveson-Gower is "Shrimp," Pelham Warner "Plumb," A. N. Hornby "Monkey" Hornby, and Gilbert Jessop (who, by the way, is cousin to the eye specialist of Harley-street), "the Croucher," by reason of his crouching posture when meeting the ball.

Dr. E. M. Grace, adds *The Free Lance*, is "the Coroner," because he is, or was, coroner for West Gloucestershire; C. I. Thornton is "Buns."

Such is Fame.

In a London police-court recently a detective-sergeant was giving evidence against a prisoner charged with attempting to obtain money by fraud. The prisoner, said the detective, on arrest, asked if the Hon. Mr. Lyttelton intended to prosecute. The magistrate inquired, "Is it the Hon. Alfred Lyttelton?" The sergeant replied, "The cricketer, sir?" Evidently that sergeant was either an incurable enthusiast

about cricket or a most indifferent student of politics. Perhaps, however, he was right in his remark. Mr. Lyttelton's position as a cricketer was absolutely beyond question, but there are varying opinions about his statesmanship.

Doherty's Generous Impulse.

On the occasion of the recent fight for the tennis championship between Doherty and Riseley, a pleasing incident took place. During the second set, the champion was cheered to the echo, and not for any brilliant stroke, but for deliberately giving his opponent an ace. A return of Riseley's was called "Out," in spite of the fact that Doherty had declared it was correct. When the next ball came back to him Doherty tapped it out of his own court. Everyone noticed the little incident, and the champion received well-merited applause.

Famous Football Authority's Views.

From New Zealand comes to hand some interesting information and suggestions from Mr. G. H. Dixon, manager of the famous N.Z. Rugby Team, with reference to future tours. He pays testimony to the good feeling between the players and himself and the hospitable welcome extended. He advocates, however, a reduced programme with a maximum of two games in any one week and a better system of appointing referees. With receipts of over £10,500 and expenditure of £7,785 (including £2,200 hotel accounts, etc., £1,040 pocket-money allowances, and £1,068 travelling), there was a balance of just short of nine thousand pounds—the exact amount being £8,008 10s. 4d. though another account says £9,902. Mr. Dixon has been voted an honorarium of £100 for his services, and right heartily has he deserved it.

After New Zealand, South Africa.

Last season in England the New Zealanders carried all before them. For 1906-7 the Colonial attraction will be furnished by the Rugby team from South Africa which is expected to reach our shores just about the time when partridge shooting opens. They will thus have a decent rest before commencing operations on September 27th at Northampton. Nothing can as yet be said as to the constitution of the team, but it is likely to be fixed up towards the end of this month, during the big tournament at Johannesburg. It has been decided that South Africa shall be what the words convey, and if not born there players will have to possess a seven-year residential qualification. It is expected that Mr. L. B. Smuts (Western Province) will take control of the party.

History of a Great Football-Team.

A history of the Corinthian F.C. is in preparation, to be entitled, "Annals of the Corinthians," will be liberally illustrated, and will be published by Messrs. Longman, Green & Co. Mr. B. O. Corbett, the famous International and ex-hon. secretary, has undertaken the preparation of what should be a very interesting volume. Of course, the foreign tours will receive every attention, as well as the home programmes.

Lucky Brum.

At the annual meeting of the Birmingham Football Club recently a profit of £2,087 on last season was reported, the year being the most successful in the club's history. All last season's leading players and some promising juniors have been booked for the coming campaign. The new ground, capable of holding 100,000 spectators, is fast nearing completion.

Arsenal's New Chairman.

At a meeting of the newly-constituted board of directors of the Woolwich Arsenal Football Club, on Tuesday evening, Mr. A. E. Kennedy, late vice-chairman of the club, was unanimously elected chairman, in place of Mr. J. Humble, resigned. Mr. Edward Mercer was elected to the vice-chair.

Employers Encourage Bowls.

The Empire Palace Challenge Trophy, presented by Sir H. E. Moss for annual competition among clubs connected with the Edinburgh and Leith Printing Establishments' Bowling Association, is to be competed for at a date to be arranged between the two clubs, Craigside and Neil and Co., who came out equal, twenty shots up, in the tournament over the public greens of Edinburgh and Leith, recently. Fourteen clubs, represented by twenty-eight rinks, were engaged. It is satisfactory to find the encouragement being given by quite a number of London companies and firms for their employés to play bowls.

A Generous Sportsman.

Sir Charles Bine Renshaw, Bart., having had the cup he presented to the West Renfrewshire clubs won outright, has generously given another trophy, and this was competed for recently. A hundred and forty-four bowlers, representing fourteen clubs, engaged in the tournament, when the Inkerman rinks ran out the winners. It was such competitions as these that early gave to Scottish bowling a zest by no means so marked upon greens below the Border.

Girl Teachers to Learn Swimming.

Yarmouth Education Committee has been surcharged £5 12s. 0d. for physical exercises for its girl pupil teachers. Notwithstanding this, the committee directed that arrangements should be made for the girls now being trained as pupil teachers to receive swimming instruction.

Tottenham Hospital Sports.

The newly-formed Tottenham Hospital Sports Association has made considerable progress towards making the first annual athletic meeting, to be held on Saturday, August 18th, a success. The Tottenham Hotspur Football Club has kindly granted the use of their ground for the occasion, and the directors are also taking a keen interest in the same, while the Tottenham Town Band have also promised to be in attendance. Particulars as to entries, etc., can be obtained of Mr. E. J. Press, 282, Mount Pleasant Road, Tottenham.

READERS' CLUB.

President - - EUGEN SANDOW.

Motto:—One may Help Many.

For the exchange of ideas, personal experience and photos for the encouragement of Club Members. Every Reader is a Club Member.

Readers are expected to act up to the Club Motto.

and for services rendered the President will award to the sender of every published idea, experience or photo, the Club Fellowship Medal as a token that the rightful owner has earned the Fellowship of the Club.

Abernethy P.O.,
Saskatchewan.
26th May, 1906.

MY DEAR FELLOW-READERS,—Am getting along better even than I expected. I can now manage a team of four horses satisfactorily. My boss leaves me to harness up and take the team into the field and start ploughing right away. He thinks I know quite a lot about English farming, and often asks me questions as to how they do things in England, and, thanks to the information given me by Mr. Harvey, I am generally able to answer him.

This is rather a slack time on a farm, and my otherwise spare time is filled up sawing poplar trees into logs and splitting these logs into smaller logs with a Canadian axe. I found this rather difficult at first, but now, according to my boss, I can use the axe very well "for a beginner." One farmer I met was full of the troubles he has had with his men. Some wouldn't work, and some *couldn't* work, and I think some of the men returning to the Old Country are men unwilling, or *unable*, to adapt themselves to new circumstances. Very many of the men coming out here would find life in an English village too slow and dull; such men are totally unsuited for the work required of them, and often return to the Old Country with a grossly exaggerated account of their hardships, in order to make a good case for themselves.

The hours sound long (up at 5 o'clock, finish between 7 and 8), and the work is fairly hard, yet I do not find it so tiring as the work at —— (naming his English place of business), and I really like this work and the conditions of life out here. A man can easily find grievances if he is so minded. In the recital, it might sound like positive discomfort to have to go one mile for drinking water, to have to draw the water for the horses in a bucket, to sleep on a straw mattress, to get up at five (I get up between three and four, from choice), to have pork in its various forms at nearly every meal (the diet is yet varied and wholesome); yet, in spite of all these apparent grievances, I find life comfortable; perhaps far more comfortable than do many people in the Old Country. I have one grievance, but that is a matter of sentiment. [My correspondent evidently is not seeking for trouble.—EDITOR.] The people whom I am with are kind and considerate, and do what they can to make me feel at home. Sunday seems the longest day in the week to me. To-day (Sunday) there is quite a house-party here. There are half a dozen gentlemen and seven or eight ladies, not to mention children, at dinner. I was treated quite as a guest. It is early for me to give an opinion as to my prospects, or what are the prospects of any other young fellow such as myself, but I know such opinion will be of interest to some of my fellow-readers, if backed by substantial testimony. From the evidences of success on every hand, I feel confident my prospects are far better here than they would have been in the Old Country.

The man I am working under is about my age. He came here with his father eight years ago (his father had very little capital). After six years, his share of the profits, with some money earned working out, were sufficient for him to buy this farm from his father; he also owns eight horses and farm implements, etc., and has been able to bank money. His elder brother started farming, without capital, five years ago. He managed to rent a farm on credit, and bought implements on credit. At the end of three years he had not only *paid* his debts but was able to pay the first instalment for purchase of farm. This year he has 320 acres under wheat alone. My boss tells me this brother will be able to retire in nine or ten years. The farm next the one I am on is owned by a man who came as a bankrupt farmer from Ontario. He homesteaded (bye-the-bye, the farm I am on was a homestead), did well, and was able to buy adjoining land; his farm is now let for 2,000 dollars. There are many similar cases. The owners of the other two adjoining farms made sufficient to retire early. It must not be thought from this that a man merely has to commence farming to amass wealth. To succeed, it seems absolutely necessary that a man can hustle and work really hard. To get a lot done, never mind how, is the motto of the Canadian farmer.

The father of the man I am with declares that, though land is dearer, and it is difficult to get good homesteads, yet the prospects for a beginner are better now than they have ever been. Farmers can get more in touch with the markets,

and get a much better price for their wheat, etc. Now, there is only one line running across Canada, but the Grand Trunk and Canadian Northern are building railways across the continent as quickly as the supply of men will allow, and a good deal of new railway will be opened in the fall

Most of the farmers about here to whom I have spoken about homesteading, say there is not so much in it as there appears, and they advise renting a farm. Both the man I am with, and his brother, filled homesteads, but let them go. Four sons of a neighbouring farmer took up homesteads, but gave them up to rent an improved farm. The contention is, that a homestead will not yield any return for a year or so. Nevertheless, I have written to most of the Government land agents, asking for information *re* vacant homesteads, and for particulars of railways now building.

I am getting 15 dollars a month for first month, with board. I intend to strike for a considerable rise, but my boss told me that he wanted a cheap man, so I may have to leave to get better wages. I have advertised as widely as possible in the immediate district that an experienced farm hand, who is a good worker, wants a job at 25 dollars or 30 dollars a month, with board (you mustn't be modest in this part of the world).

My boss's wife, though a town-bred girl, who only came out here two years ago, has adapted herself to the new conditions, and makes quite a good farmer's wife, though she has retained the habit of giggling without apparent cause. She makes the bread, butter, lard, etc., and when there is no paid man, and her husband is away in town, she feeds and draws water for the horses, etc. (the latter is quite heavy work for a woman). She says she likes the place, and her sister has just come out to join her.

It is not much good a man coming out here unless he is prepared to do manual labour. Many I saw on the boat did not appear physically fit, and probably could not do a hard day's work. Farm labourer's work, though manual, and not mental in the sense generally understood, is, I contend, far more intellectual than totting figures or copying invoices. It calls for observation, reasoning, judgment, and common-sense, far more than do most of the clerical occupations.

P. D. P

P.S.—Rather fear this letter may not give quite the right impression. I like the life; I consider my temperament is suited to it, but I certainly wouldn't indiscriminately advise others to come out here. There are some I know at home (who might read this letter) who, I should consider, have better prospects in England. The work here is strenuous, and the conditions of life—on some of the farms—for the paid men, at any rate, would seem extremely hard to many men. A very large percentage of men coming out here are utterly unsuited to this life, and are, therefore, failures. One man told me that this was the case with the majority, but I cannot believe this. I have met many who strongly contradicted this statement.

Both at Montreal and Winnipeg I saw many strong, able-bodied men unable to get a good living here. While in Winnipeg it rained hard one afternoon, and I spent the time exchanging a few remarks with many of the men standing under awnings, etc. They were all unemployed, some had been so for a considerable time, and many men to whom I spoke were anxious to get back to England in most cases. From what I could gather, it seemed the work did not suit them, or, rather, they did not fit the work. The father of the man I am working with, while on a holiday in England two or three years ago, brought back two men with him. He declares he persevered with one for four months, but he could not teach him to milk properly or manage horses passably. He could not do more than drive in fence posts. The other man, the farmer declares, was even a greater failure. The successful farmers with whom I have come in close contact do not appear to me to be exceptionally cute or progressive. They have average ability and are handy men, but I am inclined to think they are not so shrewd as English farmers, at least, what I have seen of them. They certainly are not such good farmers as the successful English farmers; if a farmer at home farmed in as off-hand a fashion as men do out here he would go bankrupt. The Canadians take no offence when you imply this; they are quite ready to lay the blame on the English climate. The Canadian farmers are willing to adopt new methods, but do not appear capable of originating for themselves. As far as I have been able to discover, most of their thinking is done for them, and though they will use the *most quick approved* methods, many of the small jobs are done in a way which the average man at home would consider an inexcusable waste of time. Farming out here seems comparatively simple. Some men come out and start farming right away (not an advisable course). My man's father was one (he was a milkman at home). The principal attributes for success seem to be the power to get through plenty of work and the ability to adapt means to ends, with sufficient determination and perseverance to overcome the many difficulties. Of course, the foregoing is a more or less hazy impression, and may have to be modified.

Newport's Best Developed Man.

Newport, Mon.

SIR,—I am almost 21 years of age, and although I go in for a great deal of outdoor recreation, such as football, cricket, and walking, until recently I cannot say I derived any great benefit from the same. Two months ago, I visited a friend of mine at Newbridge, Mon., and I told him I thought of giving up taking an active part in sports. He advised me to go in for Sandow's exercises. I did so, more to please him than anything else, and I am surprised and delighted to find that the exercises are doing me an immense amount of good. I am now training for a walking match, and your exercises are playing an important part in my

SOME SANDOW MAGAZINE READERS.
1. *J. Betts, Birmingham.* 2. *Ernest, Josephine, Francis and John O'Sullivan.* 3. *J. H. Parker, Liverpool.*

training. Although I cannot boast of a lot of muscle yet, I have improved considerably in health.

In our workshop we are taking an active interest in your system, and we are also going to form a class for the purpose of going in for Physical Culture. I am taking in your magazine weekly, and I am certain if young men would only read it more instead of the trashy books and papers some of them do, they would gain something of great use to them.

I may state that the friend who advised me to buy your exercises is considered by many to be the most perfectly developed man in the district, which is the result of exercising under your system.

W. Mm.

Our Tainted Milk Supply.

Norfolk Street, W.C

SIR,—At last the authorities are beginning to realise the danger attached to the nation's supply of impure milk. I read with much pleasure that a proposal has been submitted to the L.C.C. to promote a drastic measure for the purpose of purifying the milk supply of the Metropolis. If the measure becomes law, which I sincerely hope will happen, and I am sure you yourself and the community at large will echo my statement, we shall not hear of such a high death-rate among the population, children especially. I believe it is to your efforts as much as anything that such a thing is brought about. You have repeatedly, time after time, asked that such a step would be taken, and now your perseverance is meeting with success, which I am more than pleased to see. They are at last waking up to a grave national danger.

I know you like to hear from your pupils and readers from time to time; that is why I have written to let you know we Physical Culturists are still helping you in your good cause.

R. E. WELLS.

Scottish Enthusiasts.

Brechin, N B.

SIR,—I have been using your combined Developer for over eighteen months, and to it, along with dumb-bell exercises, I entirely owe my present development. Now that summer is here again we can get outside. By "we" I mean six or seven earnest Physical Culturists and myself who all go in for weight-lifting, swimming, jumping, and wrestling (catch-as-catch-can being the general favourite of styles).

I consider a young man cannot go in for a more healthy exercise. I enclose two photographs of myself, to be reproduced if you think fit, along with a few of my feats:—Right hand bent press, 154 lbs.; left, 112 lbs. Double-handed lift from shoulder upwards, 212 lbs. Simultaneous, 140 lbs. and 70 lbs. I can also extend to the right a 50-lb. weight, and hold there for at least thirty seconds, while I can do the same with my little finger for at least 10 seconds. I also hold a bar-bell, 212 lbs., across my shoulders with three ordinary men on it, a weight of about 7 cwts.

MEASUREMENTS.

Age	21 years	Upper Arm	15 in.
Height	5 ft. 8½ in.	Forearm	12½ in.
Weight	13 stone	Wrist	7½ in.
Neck	18 in.	Thighs	24 in.
Chest (nor)	42 in.	Calves	15½ in.
Chest (exp)	45 in.	Ankle	7½ in.
Waist	34 in.		

The above feats of strength are not for my own self-praise, but as a means of encouragement to my fellow-readers.

Abner W. Milne.

Army Officer's Striking Testimony.

Meerut, India.

Sir,—I followed, as a youngster, your doings during your *debut* in the autumn of 1889 with the greatest interest, and in December witnessed your performances in the Alhambra, and again in Southsea in '91, and in Calcutta last year. I was greatly impressed, but did not think seriously of your system for myself till June, 1900, when, having been nine years out here in tropical climates—Aden and Burma being two of the delectable spots I frizzled in—and having been wasted by four years' ravage by tape-worm, I was anæmic and generally in a low and weak state. I then saw your book on "Strength," and saw the changes wrought in one or two acquaintances whom I knew before to have been weak and miserable men, and this brought about a desire to try your system.

I quickly sent for your Spring-grip Dumb-bells, and set to work in earnest with them, and in a short time the result exceeded all anticipations. In six months my measurements were pretty nearly what they are now, and which I give below, alongside the measurements I started with. I am as fit as nearly any man of my age in India, and heat, cold, work and fatigue affect me little. Your Grip Dumb-bell I regard as one of the marvels of the age, and one which over all others will have the most far-reaching results. Your system of physical instruction and improvement, and the initiative you took, threw an impetus into, and directed public attention to, a subject which had been hitherto much neglected. Every convert to your system produces many others, and new institutions of somewhat similar procedure spring up on every side, all contributing to the popular weal. I have converted personally over 100 men; these in their turn convert others, and so it goes on. As a result of my experiences and discussions at table and elsewhere, clubs, messes and hotels have been full of men working away with your little instruments, at my instance.

MEASUREMENTS.

	1900.	1906.
Age	30 years.	36 years.
Height	5 ft. 10¾ in.	5ft. 10¾ in.
Weight (stripped)	9st. 10lbs	12st. 7lbs.
Chest (contracted)	35 in.	41 in.
„ (expanded)	37 in.	44½ in.
Upper Arm	12⅜ in.	14½ in.
Forearm	11 in.	12½ in.
Thigh	21 in.	24½ in.
Calf	13¾ in.	15½ in.
Waist	28 in.	32 in.

(Capt.) C. E. Preston,
Indian Army.

Wife's Advice to the Unmarried.

Sheffield.

Sir,—Seeing that letters from your lady readers do not appear to be very numerous, I have great pleasure in sending you my experience of Physical Culture, which I hope you will be able to publish in your magazine.

Six years ago I suffered from indigestion and constipation, and used all kinds of patent medicines and pills without any beneficial results. Then, under the guidance of my husband, I commenced a course of systematic exercise with Sandow's Developer and Dumb-bells, with the result that I now enjoy perfect health, and that life, instead of being a burden, is a pleasure.

I should also like to tell your lady readers who still wear that imitation ideal figure maker—King Corset—round their waists, crushing their internal organs out of place, that if they only knew what it was to free themselves of corsets they would never again enclose their body into such an uninviting embrace, neither would they have "whalebone," steel "busks," or any other hard substance, to enable them to keep their body in a decent shape.

I write now from my own personal experience, having been without corsets or support of any kind for the past six years. Even my own dressmaker would not have been any wiser had I not informed her; so you will be able to judge the great benefits I have derived from Physical Culture.

My husband and I try to keep to your motto, "One may help many." When we have visitors or friends, he or she is introduced to our strong room and the benefits of systematic exercise are explained to them, and by so doing we have been able to get a large number of Physical Culture enthusiasts.

As a last word I would advise every young lady who is not married to look for a Physical Culture man, and the gentlemen to look for a Physical Culture girl. Then the essence of extreme happiness would be theirs, and they would also have the satisfaction of knowing they had done one little bit towards Physical Regeneration.

(Mrs.) Wilfred Jenness.

"A Nation of Young Sandows."

Palmerston North,
New Zealand.

Sir,—I am writing to you, knowing the keen interest you are taking in the welfare of this our island home, and the great interest you are continuously showing for the welfare of the

juvenile population in the public schools throughout the Empire. Nearly two years ago I wrote to you, telling you what I was doing and intended doing for the Wanganui Education Board Schools, and making certain suggestions to you re same. I received a reply from the manager of the magazine, I think, if I recollect aright, in which he said you were in the East, but when you returned he would place the matter before you. But I presume you receive so many letters of a similar nature that mine has been smothered amongst the number. In that letter I said I would keep plugging away at the authorities until they would be practically compelled to give systematic breathing exercises a fair test. The marked papers I am posting you by this mail will show that I am within measurement of seeing the Sandow system of breathing exercises adopted throughout the whole of the New Zealand schools.

It is now over four years ago since I approached the Wanganui Education Board, and issued an invitation to let me take a squad of lads under your system of children's exercises *versus* another squad under three movements, the results of which competition, you are aware, was a most decided win for Sandow's Physical Culture. In the face of opposition I was appointed instructor to teachers one day a week, providing funds were available—a barren honour, as funds were not available. However, I still kept hammering away, and in June, 1904, I was requested to take a class of teachers at the Winter School, Wanganui, for which I received the sum of £5, which I immediately expended in charts for the benefit of the teachers, and more besides. To be sure the system would receive a fair test, I applied for permission from the Board to visit the various schools and instruct the teachers at my own expense. I received permission, but not without opposition from interested quarters, and which was carried to the Board table. Some members voted against it.

As you will note by the *Wanganui Chronicle's* leading article, my efforts have been so successful and the results so startling to the opposition, that they are now silent.

While Mr. Hornibrook, Drs. Greenwood and Thacker have been doing good work by their agitation in the south this last year or so for the rising generation, I have had a lone battle to fight in the north. By our united efforts I am confident the Government will ultimately be compelled by public opinion to give this earnest consideration—I mean, of course, Physical Culture in schools.

Two years ago I converted my Physical Culture School in Wanganui into a club, so as to leave myself free to devote all my energy to Physical Culture in schools. With this end in view I accepted a position as travelling representative to the Mutual Life Association of Australasia, conditionally that I was allowed a free hand with the public schools' work. By this means I was enabled to devote myself to the teaching of the system in schools. Besides the schools mentioned in the chairman's report, I visited many other schools, but those mentioned are those I got my returns from for the Board.

If you ever visit New Zealand again, you will find in the near future a nation of young Sandows. When I left the Wanganui Physical Culture School as principal, two of my old pupils, viz., Messrs. Marshall and Atkins, took over the instructor's position. Mr. George Marshall is now instructor to the Wanganui T.Y.M. Institute, one of my old clubs, and also teaching the children exercises in the Wanganui Schools.

R. O. Jarrett.

P.S.—Mr. W. Wood, M.H.R., Palmerston North, has to-day asked me to give him a typewritten copy of my report to the chairman of the Board, for use in the New Zealand House of Representatives, which commenced its session in June last. Other members of other districts, whom I have interviewed, have promised to give their support to any measure which may be introduced in the House. I believe Mr. Ell, member for Christchurch, will introduce a measure this session in favour of Physical Culture in schools. There are about 180 schools under the jurisdiction of the Wanganui Board.—R.O.J

A Tommy Atkins's Advice.

Crownhill, Devon.

Sir,—I am writing to tell you that I have benefited greatly by your system of Physical Culture. I first took to your system the latter end of last year. I was stationed at Cape Town, South Africa, when I had the opportunity of seeing you perform, and resolved to go in for your system, which I am pleased to say has done myself and several of my comrades much good, both as regards health and strength. I was always fond of athletics, gymnastics, football, etc., but I find Physical Culture such as put forth by you far better for bodily health and strength. I have assisted several of my comrades in taking up your system, and they, too, express surprise at the results obtained by adhering to the rules as laid down in your book entitled "Strength, and How to Obtain It." I also find much benefit obtained by setting the muscles, as shown by your poses, which are printed in your book. I always run through them after using the Bells or Developer, and by so doing I find more control is obtained over the muscles, and that I can move them by exercising "will power" only, which becomes quite pleasant to oneself.

A soldier gets a course of gymnastics when he first enlists; after that, his physical training is very small, but, of course, his physical qualities are greater than those of a good many civilians, as he is always in the open air, and has plenty of drill and marching, which tends to keep him in good health. If all soldiers took to your system of physical training, and devoted a portion of their leisure time to it, England, in my opinion, would have a far more efficient army than she has now. (Lance-Corpl.) H. Springett.

Letters have been received from the following, but are scarcely of enough general interest for publication: W. H. S. (Bournemouth); J. P. (Middleburg, S. Africa); G. W. (Highbury).

ARTICLETTES.

Three Months' Soldiers.

It is just a little over three months since Lieut.-Colonel Pollock started his experiment of turning raw recruits into seasoned soldiers in a period of six months, and recently the result of the work was reviewed by Princess Alexander of Teck at Hounslow Heath.

The recruits went through company drill, manual exercise with the rifle, and executed a skirmish by half-companies, concluding with a march past. The various movements were executed with soldierly precision, and it was difficult to believe that recruits of such short standing could have reached the degree of efficiency that was displayed.

The men are a finely "set up" lot, and show the results of military training most emphatically. All of them have "passed" in semaphore drill, and thirty in the Morse telegraph training. Princess Alexander of Teck complimented Lieut.-Col. Pollock on the excellent work which she witnessed.

From a return just issued by the sergeant-major of the company, it appears that the recruits came from the following employments:—

1 Auxiliary postman.
2 Barmen.
1 Billiard-marker.
1 Boots.
1 Brass finisher.
4 Bricklayers.
1 Brother of a Training Colony [*sic*]
4 Butchers.
2 Carmen.
1 Carpenter.
1 Checker.
12 Clerks.
4 Club waiters.
1 Cook.
1 Copyholder [? Printing trade].
1 Cyclist, G.P.O.
1 Dentist's assistant.
2 Drapers.
2 Engine cleaners.
4 Electrical engineers' assistants.
1 Farm hand.
1 Farm pupil.
2 Fishmongers.
3 Footmen.
1 Fruit and flower grower.
1 Factory hand.
2 Gardeners.
4 Grocers' assistants.
2 Insurance agents.
10 Labourers.
1 Liquidisator.
1 Motor-cycle racer.
1 Machinist to engineer.
2 Milkmen.
1 Picture-frame maker.
4 Porters.
2 Plumbers' assistants
1 Publishers' stock-keeper.
2 Storekeepers.
2 Stable lads.
1 Stevedore.
1 Sailor.
1 Surveyor.
1 Shop assistant
1 Sawyer
1 Tailor.
1 Tram conductor.
1 Turner.
1 Warehouseman.
1 Weight-lifter.
1 Wheelwright.
3 No trade or calling.

Physical Deterioration. Action in Scotland.

A number of gentlemen who take an active interest in the subject of physical deterioration are making efforts to arrange for a deputation to wait on the Prime Minister with a view to having their views fully set forth. They have already approached the Secretary of State for War and the President of the Board of Education, and have been received sympathetically by both these Ministers.

Their object is to have a regular and systematic physical examination made of all the children in the public elementary schools throughout the country, and they hope further that reasonable steps will be taken by the local education authorities to provide the remedies for physical defects reported by the medical officers in those cases where the parents of the children are unable to provide them. Some local authorities have already done something in this way on a small scale, and I hear from the principal agents in the movement that the Scotch local authorities have made more progress in the matter than those in England. To carry out the scheme would, of course, require the expenditure of a considerable sum of money, and at the moment the provision of this sum is the principal difficulty to be overcome.

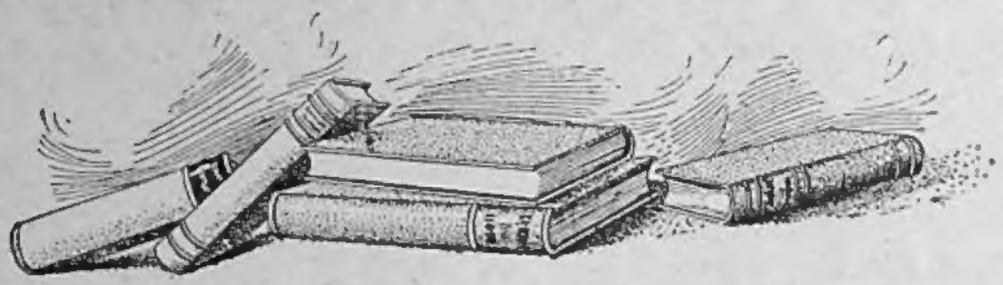
Our Brain-Cell.

Our brain-cell is an independent unit provided with multiple processes, by means of which it is capable of acting not through one nerve alone, but several. A simple illustration of how it works is furnished by our not infrequent hunt for a name or an idea which we possess. We feel that the name is there, but we cannot recall it. We get various names near it, beginning even with the same letter or the same vowel sound, yet only after minutes, or even hours, does it actually occur to us.

What is supposed to happen is that the particular cell of intellection which we are using throws out its process among the cells of memory for names, and though this process is brought in connection with cells containing similar names, it is only after a more or less prolonged search that it hits on the right one. It is as if the telephone operator in the central office felt around blindly for the connection wanted, and only after putting the plug into various holes eventually struck the proper one.—*Family Doctor.*

A Cocaine Epidemic.

The cocaine habit is assuming alarming proportions at Delhi. The evil has spread to rich and poor, to Hindus and Mohammedans, and even to women and children. Between 800 and 1,000 phials of poison are sold daily in the city; not a few young men and even lads belonging to well-to-do families consume from four to six phials a day each. Coolies and persons engaged in menial professions also have not escaped contagion. Even beggars seem to prefer cocaine to food.—*Paisa Akhbar*, Lahore.



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